JEENA SIKHO® LIFECARE LIMITED
(Formerly known as Jeena Sikho Lifecare Private Limited)
REGD OFFICE: SCO-11, Kalgidhar Enclave, Baltana, Zirakpur, Punjab-140604, 01762-513185
Branch: B-26, Opp. Metro Pillar No. 223, Rohtak Road, New Multan Nagar, Delhi - 110056
CIN NO.: L52601PB2017PLC046545 Email ID.: cs@jeenasikho.com

Ref. No. ..... Dated .....

Date: 28.03.2025

To,
The Manager
Listing Compliance Department
National Stock Exchange of India Limited
Exchange Plaza, Bandra Kurla Complex,
Bandra (East), Mumbai-400051

SYMBOL: JSLL
ISIN: INE0J5801011

Sub: Disclosure pursuant to Regulation 30 of SEBI ((Listing Obligations and Disclosure Requirements) Regulations, 2015

Dear Sir/Madam,

In reference to captioned subject, we would like to update National Stock Exchange of India Limited (the "NSE") that following Research Articles, prepared by Acharya Manish Ji (Managing Director and Meditation Guru, Jeena Sikho Lifecare Limited), Dr. Gitika Chaudhary (Senior Consultant, General Surgeon, BAMS, PGDIP, PGDGS, MS (Ay.), Jeena Sikho Lifecare Limited), Dr. Richa (Research Officer, BAMS, PGDIP, Jeena Sikho Lifecare Limited), Dr. Sunil Kumar Verma (Consultant, BAMS, Jeena Sikho lifecare limited Clinic Ahmedabad) Dr. Garima (Consultant, BAMS, Jeena Sikho lifecare limited), Dr. Neha Sharma (Study Physician, BAMS Jeena Sikho lifecare limited), Dr. Himanshu Chawla (Consultant, BAMS, PGDIP, DNHE, Jeena Sikho lifecare limited Clinic Karol Bagh, Delhi).

S. No.	Type	Name
1.	Research Article	Revitalizing Fertility: A case report on the Ayurvedic Management of Oligospermia (Shukrakshaya)
2.	Research Article	Effective management of renal calculi (Mutrashmari) with an ayurvedic treatment: A Case Report
3.	Research Article	Management of early-stage breast cancer with ayurveda: A case study

Further, Research Articles are attached as **Annexure A, B and C.**

This is for your kind information and record purpose.

Thanking you,
Yours faithfully,

For Jeena Sikho Lifecare Limited

MANISH GROVER
Digitally signed by MANISH GROVER
Date: 2025.03.28 19:11:01 +05'30'

Manish Grover
Managing Director
DIN: 07557886
Place: Zirakpur, Punjab
Date: 28.03.2025

IJAYUSH
International Journal of AYUSH
AYURVEDA, YOGA, UNANI, SIDDHA AND HOMEOPATHY
http://internationaljournal.org.in/journal/index.php/ijayush/

International Journal
Panacea
Research library
ISSN: 2349 7025

Original Research Article Volume 14 Issue 02 February 2025

REVITALIZING FERTILITY: A CASE REPORT ON THE AYURVEDIC MANAGEMENT OF OLIGOSPERMIA (*SHUKRAKSHAYA*)

Acharya Manish Ji[1], *Dr. Gitika Chaudhary[2], Dr. Richa[3], Dr. Sunil Kumar Verma[4]

[1]Director, Meditation Guru, Jeena Sikho Lifecare limited
[2]Senior Consultant, General Surgeon, BAMS, PGDIP, PGDGS, MS (Ay.), Jeena Sikho lifecare limited
[3]Research officer, BAMS, PGDIP, Jeena Sikho lifecare limited
[4]Consultant, BAMS, Jeena Sikho lifecare limited Clinic Ahmedabad

*Corresponding Author's Email id- shuddhi.research@jeenasikho.co.in

Abstract: -

This case study explores the integrative *Ayurvedic* treatment of a 35-year-old male diagnosed with oligospermia, characterized by a suboptimal sperm count of 1 million/mL, well below the normative threshold set by the World Health Organization. In addition to challenges in conceiving, the patient suffered from recurrent sinusitis, significant fatigue and weakness, compounded by a predominantly sedentary lifestyle and long-term tobacco use. Employing a holistic *Ayurvedic* approach, the treatment protocol included dietary adjustments, lifestyle modifications and a regimen of specific *ayurvedic* formulations aimed at correcting the underlying *doshic* imbalances specifically *Vata* and *Pitta*, and enhancing *Shukra Dhatu*, the reproductive tissue.

Post-treatment results were promising, showing a surge in sperm concentration to 35 million/mL and improvements in motility with actively motile sperm increasing significantly. Subjective improvements were also notable; the Fatigue Severity Scale score decreased and the Medical Research Council Scale for Muscle Strength showed enhanced muscle function. These results suggest that an *Ayurvedic* approach, focusing on lifestyle and systemic balance, can significantly improve both quantitative and qualitative aspects of sperm, thereby enhancing overall reproductive health. This case underscores the potential of traditional medicine in treating complex health conditions like oligospermia and highlights the need for further research to validate and optimize such integrative treatment approaches.

Keywords: - *ShukraKshaya*, Oligospermia, Infertility

Introduction

Oligospermia, commonly referred to as low sperm count, is a significant factor contributing to male infertility, characterized by, fewer spermatozoa in the ejaculate than the normative threshold set by the World Health Organization (WHO), which is currently less than 15 million sperm per millilitre of semen.[1] This condition not only affects physical health but also poses psychological and social challenges to affected individuals.

In Ayurveda, oligospermia is closely linked with the concept of *"ShukraKshaya." Shukra* denotes the semen or reproductive tissue, while *Kshaya* refers to a decrease or degradation in quality or quantity.[2] Classical texts like *Charaka Samhita* and *Sushruta Samhita* elaborate on *Shukra'*s significance in reproduction and maintaining overall vitality. References in these texts suggest a variety of *ayurvedic* formulations and lifestyle modifications aimed at enhancing *Shukra* and correcting related imbalances.[3] Previous work in *Ayurvedic* medicine has shown promising results in treating *ShukraKshaya* with dietary modifications, *ayurvedic* medicines and *Panchakarma* therapies, focusing on improving not just sperm count but also overall physical and mental wellness which are pivotal in the holistic treatment methodologies of *Ayurveda*.[4]

From a modern medical viewpoint, oligospermia is influenced by numerous factors, including genetic anomalies, lifestyle choices (such as smoking and alcohol consumption), environmental toxins and medical conditions such as varicocele, hormonal imbalances and infections of the reproductive tract.[5] The pathophysiology primarily involves the impaired production of sperm by the testes or obstruction in sperm transport. Understanding the epidemiology, it is evident from research that sperm counts have been notably declining in the recent decades across the globe, which has been linked to modern lifestyle practices and environmental factors, signalling a rising prevalence and public health concern.[6]

According to *Ayurveda*, the pathogenesis *(Samprapti)* of *ShukraKshaya* involves the vitiation of *Vata* and *Pitta Doshas* along with impairment of *Shukra Dhatu*. The depletion *(Kshaya)* or aggravation of *Doshas* can be caused by improper diet, lack of sleep, excessive mental work, or physical strain, which hampers the body's natural balance and subsequent formation and quality of *Shukra.*[7] Factors contributing to this imbalance includes dietary and lifestyle habits, psychological stress and environmental conditions, each resonating with modern risk factors identified for oligospermia.

Understanding oligospermia through both *Ayurvedic* and modern lenses allows for a comprehensive view, integrating ancient wisdom with contemporary research and

techniques. Helping tackle this growing issue requires a multifaceted approach, combining diet, lifestyle modifications, medication and possibly assisted reproductive technologies in severe cases. This convergence of knowledge can lead to more effective and personalized treatment strategies, enhancing reproductive health and wellbeing.

Case Report

Patient History and Information

The patient, a 35-year-old male, presented with oligospermia diagnosed through a semen analysis, which indicated a sperm count significantly below the normal range established by the World Health Organization. The patient had been experiencing recurrent bouts of sinusitis, exacerbating discomfort and potential systemic inflammation that could be indirectly influencing his reproductive health. The patient also had fatigue and weakness.

Diet and Lifestyle History

The patient's diet was primarily calorically dense with a high intake of processed and fatty foods, and low in fruits, vegetables and whole grains, which may contribute to overall reduced health and suboptimal reproductive function. His lifestyle was sedentary with minimal physical activity, which is complemented by his occupation, requiring prolonged periods of sitting.

Medical and Surgical History

There had been no significant prior medical interventions or surgical procedures reported, except for the management of his recurrent sinusitis through the intermittent use of over-the-counter decongestants and prescription antibiotics during exacerbations. No significant improvement in sinusitis had led to a pattern of frequent medication use. The patient also had generalized weakness and fatigue that might be related.

Family History

The patient did not report any significant genetic or familial health issues that could be directly linked to his current reproductive health concern.

Addiction History

A notable aspect of the patient's history was his longstanding tobacco use, which had been a consistent part of his lifestyle for over 15 years. This addiction was significant, as tobacco is known to adversely affect sperm quality and overall reproductive health.

Onset and Disease Progression

The concern regarding oligospermia surfaced approximately two years ago when the patient and his partner faced difficulties conceiving. The couple has been attempting to conceive naturally for about three years without success, prompting an evaluation of both partners' reproductive health. His initial semen analysis revealed a sperm count of 1 million sperm per millilitre, well below the normal threshold. Further evaluations have consistently shown similar results, with little to no improvement in sperm concentration.

Given the chronicity of his sinusitis and its potential impact on his general immunity and wellbeing, combined with a lifestyle and addiction that negatively impacts sperm production, a multifaceted approach to his treatment was considered necessary. This approach aimed at addressing not just the symptom of low sperm count but also the broader systemic imbalances contributing to his condition.

Vital Parameters:

- **Body Mass Index (BMI):** The patient presents with a BMI of approximately 22.4 kg/m^2, suggestive of a normal BMI.
- **Blood Pressure:** 116/80 mmHg.
- **Heart Rate:** Regular, at 74 beats per minute.

Ayurvedic Examination

Table 1. *AshtavidhaPariksha* (Eight-fold Examination)

Sr. No	Examination	Findings
1.	***Nadi* (Pulse**	*Vata- Pittaja*
2.	***Mutra* (Urine)**	*Ishatapita*
3.	***Mala* (Stool)**	*Abadha*
4.	***Jihva* (Tongue)**	*Saam*
5.	***Shabda* (Voice)**	*Spashta*
6.	***Sparsha* (Touch)**	*Anushna*
7.	***Drik* (Eyes)**	*Shweta*
8.	***Akriti* (Appearance)**	*Madhyam*

Table 2. *DashavidhaPariksha* (Ten-fold Examination)

Sr. No	Examination	Findings
1.	***Prakriti* (Constitution):**	*VataKaphaja*
2.	***Vikriti* (Imbalance)**:	*VataPittaja*
3.	***Sara* (Tissue Excellence)**:	*Madhyam*
4.	***Samhanana* (Body Build)**:	Moderate
5.	***Pramana* (Body Proportions)**:	Within normal limits.
6.	***Satmya* (Adaptability)**:	Moderate
7.	***Satva* (Psychological Strength)**:	*Madhyam*
8.	***Ahara Shakti* (Digestive Strength)**:	*Madhyam*
9.	***Vyayama Shakti* (Exercise Capacity)**:	Moderate
10.	***Vaya* (Age)**:	*Madhyam*

Systemic Examination

- **Cardiovascular and Respiratory Systems:** Examination revealed no abnormalities in heart rate, rhythm, or respiratory sounds, indicating normal functioning of both the cardiovascular and respiratory systems.
- **Gastrointestinal System:** The abdominal exam showed no tenderness, masses, or abnormalities, and bowel sounds were normal.
- **Genitourinary System:** Examination of the external genitalia and testes showed normal morphology and texture, with no abnormalities detected upon palpation.
- **Neurological System:** The patient was fully alert, with intact cranial nerve functions and demonstrated normal motor and sensory responses. Reflexes were symmetrical across all tested sites.
- **Musculoskeletal and Dermatological Systems:** There were no signs of endocrine imbalances such as gynecomastia or abnormal hair patterns. Additionally, no musculoskeletal complaints or dermatological lesions were noted during the examination.

Diagnostic Assessment

Laboratory Results: done on 25/11/2024

PHYSICAL EXAMINATION

- **Volume:** 2.0 ml
- **Colour:** Whitish
- **Reaction:** Alkaline
- **Viscosity:** Normal

MICROSCOPIC EXAMINATION

- **Total Sperm Count:** 01 million/ml
- **Motility**
    - **Actively Motile:** 50 %
    - **Sluggish Motile:** 05 %
    - **Non Motile:** 45 %
- **Pus Cell:** 1-2 /HPF
- **Fructose Test:** POSITIVE

Assessment Parameters Used in this Case Report: -

Objective Parameters - Semen Analysis

1. **Total Sperm Concentrate**[8]:
    - **Scale**: Count per millilitre (ml). Normal range is ≥ 20 million/mL.
2. **Sperm Motility**:
    - **Scale**: Classified into:
        - PR (Progressive motility): Sperms moving actively, either linearly or in a large circle, ≥ 32%.
        - NPM (non-progressive motility): Sperms move but do not progress forward, ≥ 60%.
        - NM (Non-motile): Sperms that do not move, ≤ 75%.

Subjective Parameters - Sleeplessness, Fatigue and Weakness

1. **Fatigue**[9]:
    - **Scale**: Fatigue Severity Scale (FSS), which has 9 statements that the patient rates from 1 (strongly disagree) to 7 (strongly agree) regarding their fatigue levels.
2. **Weakness**[10]:
    - **Scale**: Medical Research Council (MRC) Scale for Muscle Strength. This is a 6-point scale ranging from 0 (no muscle contraction) to 5 (normal strength).

Therapeutic Intervention

I. Diet Plan:[11]

The dietary guidelines provided by Jeena Sikho Lifecare Limited Clinic Ahmedabad included the following key recommendations:

a. Foods to be avoided:

- Do not consume wheat, refined food, milk and milk products, coffee and tea and packed food.
- Avoid eating after 8 PM.
- During solid consume as small bite and chew 32 times.

b. Hydration:

- During water intake, take sip by sip and drink slowly to ensure the amount of water intake each time.
- Drink about 2-3 liters of alkaline water 3 to 4 times throughout the day.
- Include Herbal tea, living water and turmeric-infused water as part of daily routine.
- Boil 4 liters water & reduce up to 2 liters and consume.

c. Millet Intake:

- Incorporate five types of millet into diet: Foxtail (*Setariaitalica*), Barnyard (*Echinochloaesculenta*), Little (*Panicumsumatrense*), Kodo (*Paspalumscrobiculatum*) and Browntop (*Urochloa ramose*).

- Use only steel cookwares for preparing the millets
- Cook the millets only using mustard oil.

d. Meal Timing and Structure:

1. Early Morning (5:45 AM): Herbal tea, curry leaves (1 leaf-1 min/5 leaves-5 min) along with raw ginger and turmeric.
2. Breakfast (9:00-10:00 AM): The patient had steamed fruits (Seasonal), steamed sprouts (according to the season) and a fermented millet shake (4-5 types).
3. Morning Snacks (11:00AM): The patient given red juice (150 ml) and soaked almonds.
4. Lunch (12:30 PM - 2:00 PM): The patient received Plate 1 and Plate 2. Plate 1 will included a steamed salad, while Plate 2 with a cooked millet-based dish along with raw ginger and turmeric.
5. Evening Snacks (4:00 – 4:20 PM): Green juice (100-150 ml) along with 4-5 almonds.
6. Dinner (6:15-7:30 PM): The patient served a steamed salad, chutney, and soup, as Plate 1, along with millet khichdi as Plate 2 along with raw ginger and turmeric.

e. Fasting:

- It is advised to observe one-day fasting.

f. Special Instructions:

- Express gratitude to the divine before consuming food or drinks.
- Sit in *Vajrasana* (a yoga posture) after each meal.
- 10 minutes slow walk after every meal.

g. Diet Types:

- The diet comprises salt-less solid, semi-solid and smoothie options.
- Suggested foods include Herbal tea, red juice, green juice, a variety of steamed fruits, fermented millet shakes, soaked almonds and steamed salads.

II. Lifestyle Recommendations

(i) Include meditation for relaxation.

(ii) Practice barefoot brisk walk for 30 minutes.

(iii) Ensure 6-8 hours of quality sleep each night.

(iv) Adhere to a structured daily routine

Medicines used in this Case

Following medicinal Treatment was given to the patient during the admission period

Table 3 - Day 1 – 09/12/2024

Medications	**Dose**	**Anupana**	**Duration**
Spermosurge Capsule – The Ingredients are ***Viddhadaru*** is known scientifically as ***Argyreia nervosa***, ***Gokshuru*** as ***Tribulus terrestris***, ***Jeevanti*** as ***Leptadenia reticulata***, ***Shailyeam*** (likely ***Parmelia perlata***), ***Ashwagandha*** as ***Withania somnifera***, ***Kokilaksha*** as ***Hygrophila auriculata***, ***VanyaKahu*** as ***Lactuca scariola***, ***Kapikacchu*** as ***Mucuna pruriens***, ***Salam Panja*** as ***Dactylorhiza hatagirea***, ***Bala*** as ***Sida cordifolia***, and ***Chopchini*** as ***Smilax china***.	1 Cap BD	Lukewarm Water (*KoshnaJala*)	*Adhobhakta* (After Meal)
Ashwagandha ghan Vati - AshwagandhaGhanVati is a Ayurvedic supplement formulated primarily from the extract of ***Withania somnifera***, commonly known as Ashwagandha. The term "GhanVati" refers to tablets made from concentrated ayurvedic extracts, implying a more potent formulation compared to those made from dried powdered herbs alone.	1 Tab BD	Lukewarm Water (*KoshnaJala*)	*Adhobhakta* (After Meal)
Tab PunarnavaGhan - PunarnavaGhan Vati is an Ayurvedic formulation in tablet form renowned for its diuretic and rejuvenative properties. The primary herb, ***Punarnava*** (*Boerhavia diffusa*), is utilized to alleviate fluid retention and swelling, support kidney and heart health and promote liver function, aiding conditions like jaundice. Additionally, it benefits the digestive system and can also be used to tackle arthritis and general weakness.	1 Tablet BD	Lukewarm Water (*KoshnaJala*)	*Adhobhakta* (After Meal)

Ge-Liv forte Syrup -*Bhringraj* (*Ecliptaprostrata*), ***Kuchri***, which could possibly refer to a regional name not commonly translated to a Latin equivalent, ***Kalmegh*** *(Andrographis paniculata),* ***Kutki*** *(Picrorhiza kurroa),* ***Vidang*** *(Embelia ribes),* ***Nishoth*** *(Operculina turpethum),* ***Daruharidra*** *(Berberis aristata),* ***ChitrakMool*** *(Plumbago zeylanica),* ***BhumiAmla*** *(Phyllanthus amarus) and* ***Sudarshan***	15 ml BD	Equal amount of Lukewarm Water *(Sama Matra KoshnaJala)*	*Adhobhakta* (After Meal)
Spermatozoa BLK – The Ingredients are *Avena sativa, Damiana* (likely referring to ***Turnera diffusa***), China Off (commonly known as ***Cinchona officinalis***), *Yohimbinum* (derived from ***Pausinystalia yohimbe***), *Agnus Cast* (also known as ***Vitexagnus-castus***), *Lycopodium* (known as ***Lycopodium clavatum***), and *Viburnum* Op. (referencing ***Viburnum opulus***).	10 ml BD	Equal amount of Lukewarm Water *(Sama Matra KoshnaJala)*	*Adhobhakta* (After Meal)
VPK Balance Kit – **Dr Immune Tab -** ***Kesar****(crocus sativus),* ***Ashwagandh****a(withaniasomnifera),* ***Shatawar****(asparagus recemosus),* ***Pippal****(piper longum),* ***Tulsi****ocimumsantum),* ***Launge****(syzigiumaromaticum),* ***Chhotielaichi****(Elaterriacardamomum),* ***Sounth****(Zingiberofficinale),* ***Haldi****(Curcuma longa),* ***Lohbhasma****,* ***Swarnmakshikbhasma, Muktashuktibhasma, Shunkhpushpi****(Convolvulus pluericaulis),* ***Papita sat****(carica papaya),* ***Pudina****(Menthaviridis),* ***Dalchini****(Cinnamomum),* ***Tejpatra****(cinnamomumtamala),* ***Badielaich****i (Amomumsabulatum),* ***Ajwain****(Trachyspermumammi),* ***Giloy*** *(Tinosporacordifolia),* ***Amalaki*** *(embliaofficinali),H****aritaki****(Terminaliachebula)* **Dr Shuddhi Powder -** ***Trikatu, Triphala, Nagarmotha****(Cyprus rotundus),* ***Vayvidan****g(Embliaribes),* ***Chhotielaich****i(Eletariacardamomum),* ***Tejpatra****(cinnamomumtamla),* ***Laun****g(Syzygiumaromaticum),* ***Nishoth****(operculinaterpenthum),* ***Rock salt****,* ***Dhaniya****(Coriandrumsativum,),* ***Piplamool****(Piper nigrum),* ***Jeera****(CumminumCyminum),* ***Nagkesar*** *(Mesuaferrie),* ***Amarvati*** *(Tinosporacardifolia),* ***Anardana****(Punicagranatum),* ***Dalchini****(Cinnamomumzelyanicum),* ***Badielaichi***	Immune tab – 1 tab BD	Lukewarm Water (*KoshnaJala*)	Dr Immune Tab : *Adhobhakta* (After Meal),

(AmmomumSubutalum), ***Hing****(Ferula foetida),* ***Kanchnar****(Boehiniavariegata),* ***Ajwain****(Trachyspermumammi),* ***Sazikshar,*** ***Pooshkarmool****(Inularacemosa),* ***Senna(****Cassia angustafolia), mishri Cam* **Nabhi Oil -** ***Harad*** *(Terminliachebula)* ***Bahera****(Terminalliabellirica)* ***Amla****(phyllanthusemblica)* ***Almond****(Prunus dulcis)* ***Hing*** *(Ferula foetida)* ***Jaiphal****(Myristicafragrans)* ***Ajwain****(Trachyspermumammi),* ***Clove****(Syzygiumaromaticum)* ***Camphor****(Cinnamomumcomphora)* *Olive(Olea europaea)* *Coconut(cocucnucifera)* ***Neem****(Azardirachtaindica)* *Lemongrass(Cymbopogon)* ***Kali jeera****(Buniumpersicum)* ***Ajmoda****(Apiumgraveolens)* ***Guggul*** *(Commiphoraweightii)* ***Giloy****(Tinosporacordifolia)* ***Chiryata****(Swertia japonica)* ***Kalonji****(Nigella sativa)* ***Til tail*** *(Sesamum indicum)* ***Katu tailam*** **Tooth Oil -** ***Glycerine*** ***Long oil*** *(Syzygiumaromaticum)* ***Peparmint*** *(Menthaarvensis)* ***Sat ajwain****(Trachyspermumammi)* **32 Herbs Tea -** ***Gauzaban****(onosmabracteatum)* ***Kulanjan*** *(Alpinia galangal)* ***Chotielaichi*** *(Elettariacardamomum)* ***Laung*** *(Syzygiumaromaticum)*	Dr Shuddhi Powder – ½ tsf HS Nabhi Oil – At night L/A		Dr Shuddhi Powder : *Nishikala*

Badielaichi *(Amomumsubulatum)* ***Khtayi*** *(Pimpinellaanisum)* ***Banafsa*** *(VIOlaodorata)* ***Jufa****(hyssofusofficianalia,* ***Ashwagandha****, (Withaniasomnifera),* ***Mulethi****(Glycerrhizaglabra),* ***Punrnava****(Boerhaviadiffusa),* ***Bramhi****(Bacopamoneira),* ***Chitrak****(plumbagozeylanica),* ***Kali mirch*** *(piper nigrum)* ***Adulsa****(Adhatodavasicanees),* ***Saunf****(Foeniculum vulgare)* ***Shankhpushpi****(convolvuli pluericaulis),* ***Tulsi****(ocimumsantum),* ***Arjun****(Terminaliaarjuna),* ***Motha****(Cyperusrotundus),* ***Sonpatra****(cassia angustafolia),* ***Sonth****(zingiberofficinale),* ***Manjistha****(rubiacardifolia), Tephrosiapurpurea,* ***Dalchini****(cinnamomumverum),* ***Gulab****(Rosa centifolia), grass tea(camliasinensis),* ***Giloy****(Tinosporacordifolia),* ***Tejpatra****(cinnamomumtamala),* ***Lalchandan****(pterocarpussentalinus),* ***white chandan****(santalum album)*	Tooth Oil – In morning after brushing 32 Herbs Tea – In morning empty stomach		

Table 4 - Day 2– 17/01/2025

Medications	**Dose**	**Anupana**	**Duration**
Spermosurge Capsule	1 Cap BD	Lukewarm Water (*KoshnaJala*)	*Adhobhakta* (After Meal)
AshwagandhaghanVati	1 Tab BD	Lukewarm Water (*KoshnaJala*)	*Adhobhakta* (After Meal)
Tab PunarnavaGhan	1 Tablet BD	Lukewarm Water (*KoshnaJala*)	*Adhobhakta* (After Meal)
Ge-Liv forte Syrup	15 ml BD	Equal amount of Lukewarm Water *(Sama Matra KoshnaJala)*	*Adhobhakta* (After Meal)
Spermatozoa BLK	10 ml BD	Equal amount of Lukewarm Water *(Sama*	*Adhobhakta* (After Meal)

		Matra KoshnaJala)	
VPK Balance Kit- • **Dr. Immune Tab** • **Dr. Shuddhi Powder** • **Nabhi Oil** • **Tooth Oil** • **32 Herbs Tea**	Immune tab – 1 tab BD Dr Shuddhi Powder – ½ tsf HS Nabhi Oil – At night L/A Tooth Oil – In morning after brushing 32 Herbs Tea – In morning empty stomach	Lukewarm Water (*KoshnaJala*)	Dr Immune Tab : *Adhobhakta* (After Meal), Dr Shuddhi Powder : *Nishikala*

Follow up and Outcome

After 1 month of *Ayurvedic* Treatment the results that were seen are

Table 6 – Outcomes – Objective Parameters

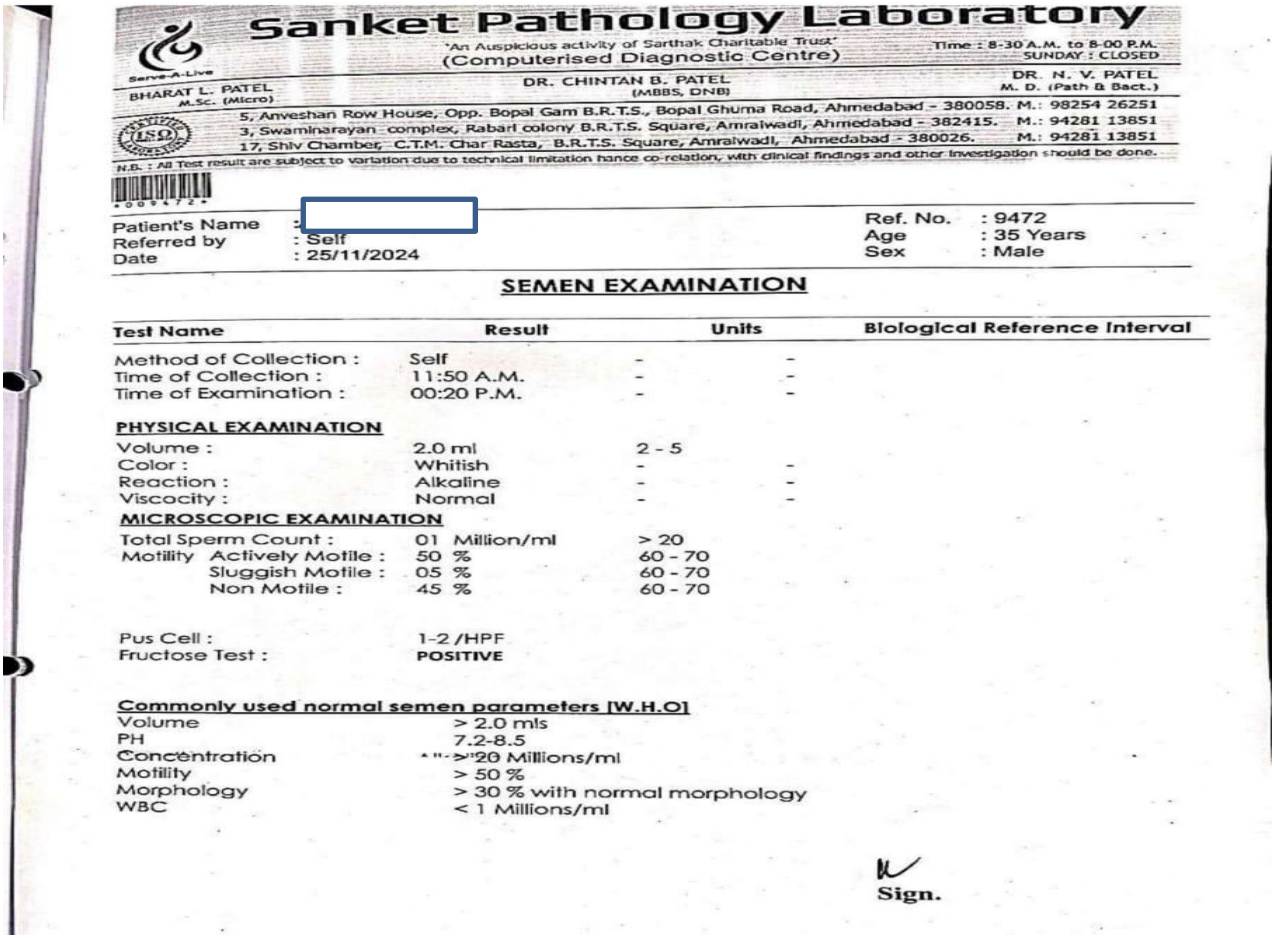
Parameters	**Pre-Treatment (25/11/2024)**	**Post-Treatment (16/01/2024)**
Total Sperm Concentrate	1 mill/mL	35 mill/mL
Sperm Motility:		
PR	50%	70%
NPM	05%	05%
NM	45%	25%
Pus cells/WBC	1-2 /HPF	2-3 /HPF
Fructose	Positive	Positive

The changes in the subjective parameters that were observed are-

Table 7- Outcomes – Subjective Parameters

Parameters	Pre-Treatment	Post-Treatment
Fatigue **Scale**: Fatigue Severity Scale (FSS)	**40 (out of 63, representing significant fatigue)**	**24 (a substantial reduction indicating less perceived fatigue)**
Weakness **Scale**: Medical Research Council (MRC) Scale for Muscle Strength	**3 (moderate muscle strength)**	**4 (good muscle strength)**

Image 1 – Before Treatment – Semen Analysis



Sanket Pathology Laboratory

'An Auspicious activity of Sarthak Charitable Trust'

(Computerised Diagnostic Centre)

Time : 8-30 A.M. to 8-00 P.M. SUNDAY : CLOSED

Serve-A-Live

BHARAT L. PATEL M.Sc. (Micro)

DR. CHINTAN B. PATEL (MBBS, DNB)

DR. N. V. PATEL M. D. (Path & Bact.)

5, Anveshan Row House, Opp. Bopal Gam B.R.T.S., Bopal Ghuma Road, Ahmedabad - 380058. M.: 98254 26251

3, Swaminarayan complex, Rabari colony B.R.T.S. Square, Amraiwadi, Ahmedabad - 382415. M.: 94281 13851

17, Shiv Chamber, C.T.M. Char Rasta, B.R.T.S. Square, Amraiwadi, Ahmedabad - 380026. M.: 94281 13851

N.B. : All Test result are subject to variation due to technical limitation hance co-relation, with clinical findings and other investigation should be done.

Patient's Name : [redacted] Ref. No. : 9472

Referred by : Self Age : 35 Years

Date : 25/11/2024 Sex : Male

SEMEN EXAMINATION

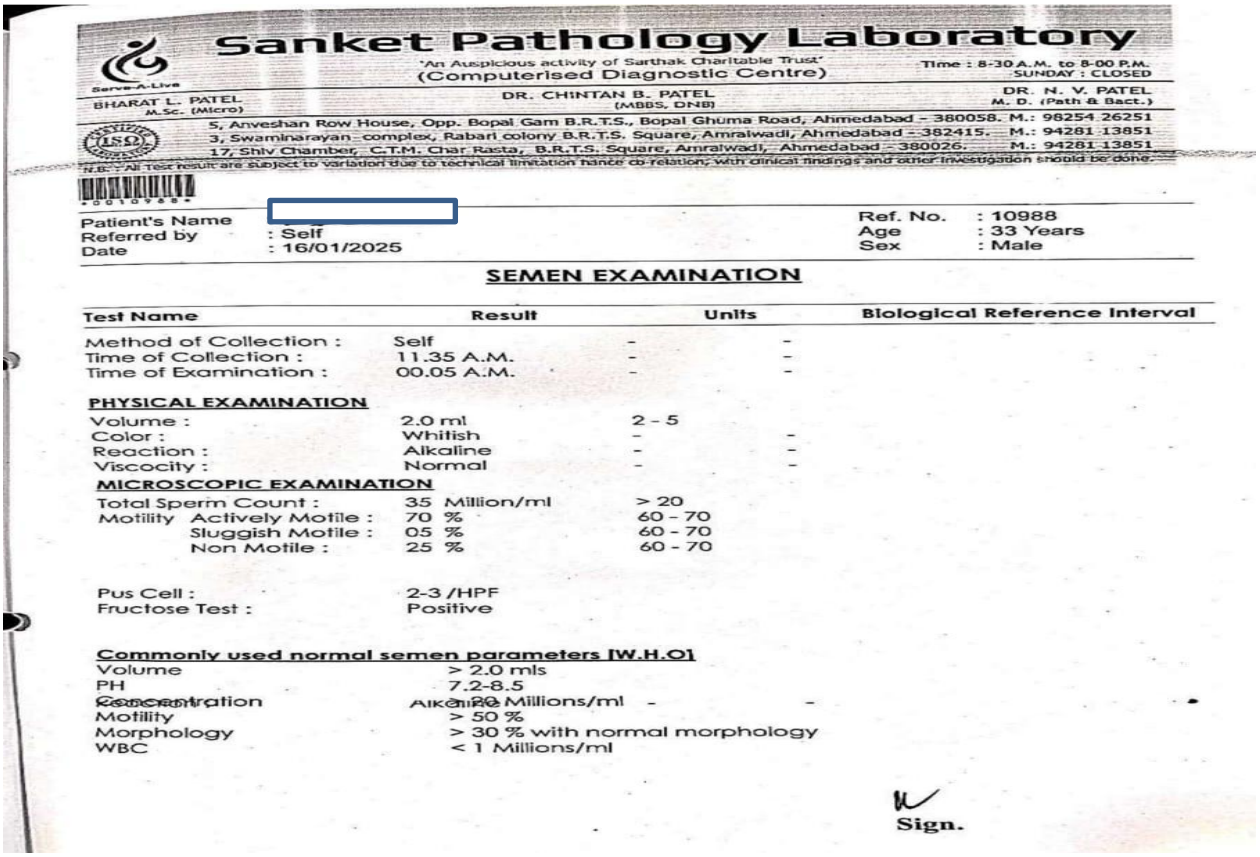
Test Name	Result	Units	Biological Reference Interval
Method of Collection :	Self	-	-
Time of Collection :	11:50 A.M.	-	-
Time of Examination :	00:20 P.M.	-	-
PHYSICAL EXAMINATION			
Volume :	2.0 ml	2 - 5	
Color :	Whitish	-	-
Reaction :	Alkaline	-	-
Viscocity :	Normal	-	-
MICROSCOPIC EXAMINATION			
Total Sperm Count :	01 Million/ml	> 20	
Motility Actively Motile :	50 %	60 - 70	
Sluggish Motile :	05 %	60 - 70	
Non Motile :	45 %	60 - 70	
Pus Cell :	1-2 /HPF		
Fructose Test :	POSITIVE		

Commonly used normal semen parameters [W.H.O]

Volume	> 2.0 mls
PH	7.2-8.5
Concentration	> 20 Millions/ml
Motility	> 50 %
Morphology	> 30 % with normal morphology
WBC	< 1 Millions/ml

Sign.

Image 2 – After Treatment- Semen Analysis



Sanket Pathology Laboratory

'An Auspicious activity of Sarthak Charitable Trust'

(Computerised Diagnostic Centre)

Time : 8-30 A.M. to 8-00 P.M. SUNDAY : CLOSED

BHARAT L. PATEL M.Sc. (Micro)

DR. CHINTAN B. PATEL (MBBS, DNB)

DR. N. V. PATEL M. D. (Path & Bact.)

5, Anveshan Row House, Opp. Bopal Gam B.R.T.S., Bopal Ghuma Road, Ahmedabad - 380058. M.: 98254 26251

3, Swaminarayan complex, Rabari colony B.R.T.S. Square, Amraiwadi, Ahmedabad - 382415. M.: 94281 13851

17, Shiv Chamber, C.T.M. Char Rasta, B.R.T.S. Square, Amraiwadi, Ahmedabad - 380026. M.: 94281 13851

N.B. : All Test result are subject to variation due to technical limitation hence co-relation, with clinical findings and other investigation should be done.

Patient's Name :
Referred by : Self
Date : 16/01/2025

Ref. No. : 10988
Age : 33 Years
Sex : Male

SEMEN EXAMINATION

Test Name	Result	Units	Biological Reference Interval
Method of Collection :	Self	-	-
Time of Collection :	11.35 A.M.	-	-
Time of Examination :	00.05 A.M.	-	-
PHYSICAL EXAMINATION			
Volume :	2.0 ml	2 - 5	
Color :	Whitish	-	-
Reaction :	Alkaline	-	-
Viscocity :	Normal	-	-
MICROSCOPIC EXAMINATION			
Total Sperm Count :	35 Million/ml	> 20	
Motility Actively Motile :	70 %	60 - 70	
Sluggish Motile :	05 %	60 - 70	
Non Motile :	25 %	60 - 70	
Pus Cell :	2-3 /HPF		
Fructose Test :	Positive		
Commonly used normal semen parameters [W.H.O]			
Volume	> 2.0 mls		
PH	7.2-8.5		
Concentration	Alkaline 20 Millions/ml	-	-
Motility	> 50 %		
Morphology	> 30 % with normal morphology		
WBC	< 1 Millions/ml		

Sign.

9Discussion

Oligospermia, indicated by a sperm count significantly below the WHO standard of 15 million sperm per mL, not only impairs fertility but also potentially affects the psychosocial well-being of individuals. In *Ayurveda*, this condition is conceptualized as *ShukraKshaya,* where *'Shukra'* denotes semen, and *'Kshaya'* refers to a reduction in quality and quantity. According to classical *Ayurvedic* texts, the vitiation of *Vata and Pitta Doshas* along with the impairment of *Shukra Dhatu* (reproductive tissue) underlines the pathophysiology or *Samprapti* of this condition. Lifestyle factors such as diet, sleep patterns, psychological stress and substance use, notably tobacco in this case, significantly contribute to this *Dosha* imbalance, mirroring modern risk factors for oligospermia.

The treatment approach in *Ayurveda* seeks not only to address the symptomatic presentation of a disease but fundamentally aims to disrupt the pathogenic process, known as '*SampraptiVighatana*'. In this case, therapeutic interventions including dietary modifications, lifestyle changes and specific *Ayurvedic* medications aimed to restore the balance of *Vata* and *Pitta Doshas* and enhance *Shukra Dhatu.*

The treatment resulted in remarkable improvement as observed in the follow-up data. Total sperm concentration substantially increased from 1 million/mL to 35 million/mL. The improvement in the motility profile with a significant reduction in non-motile sperm (from 45% to 25%) and an increase in non-progressive motility provide corroborative evidence of enhanced *Shukra* quality. These changes indicate a successful intervention impacting the seminal parameters favourably. Additionally, subjective improvements were significant, with marked reductions in fatigue and enhanced muscle strength, further supporting the systemic benefits of the *Ayurvedic* treatment approach. The mode of action of the formulations used in this disease are as follows

Spermosurge Capsule-Spermosurge Capsule is designed to enhance male reproductive health by leveraging the synergistic effects of its multiple herbs. ***Argyreia nervosa*** enhances libido and testosterone levels, ***Tribulus terrestris*** promotes sperm production and sexual drive, ***Leptadeniareticulata*** supports overall vitality, ***Withania somnifera*** (*Ashwagandha*) is known for its stress-reducing and fertility-enhancing properties. ***Mucuna pruriens*** boosts dopamine levels, potentially improving mood and libido. ***Hygrophilaauriculata*** and ***Sida cordifolia*** are reputed for their aphrodisiac and rejuvenative properties respectively. Collectively, these ingredients aim to increase sperm count and motility, enhance sexual desire and improve overall reproductive health.

AshwagandhaGhanVati : *AshwagandhaGhan Vati* primarily works by reducing stress and increasing antioxidant levels within the body. ***Withaniasomnifera***, the main ingredient, has adaptogenic properties that helps to modulate stress responses, vital for improving sperm quality and count undermined by oxidative stress. It also may enhance testosterone production, key in treating conditions like oligospermia, while improving overall mental health and physical stamina.

Tab PunarnavaGhanVati : *PunarnavaGhan Vati* acts primarily as a diuretic and rejuvenative tonic. ***Boerhavia diffusa*** *(Punarnava)* helps in reducing fluid retention and swelling, effectively detoxifying the body and promoting vital organ functions — particularly of the liver, heart and kidneys. This detoxifying effect is crucial for eliminating toxins that can affect hormonal balance and reproductive health.

Ge-Liv forte Syrup: Ge-Liv forte Syrup combines various herbs to support liver function, aids in digestion, and enhances detoxification. Ingredients such as ***Eclipta prostrata*** and ***Phyllanthus amarus*** are well-known hepato-protectives which improve liver health.

Andrographis paniculata and ***Picrorhiza kurroa*** boosts the immune system and supports digestion, enhancing overall nutrient absorption and health. ***Embelia ribes*** and ***Operculina turpethum*** have purgative properties contributing to the detoxification, important in clearing pathways that impact hormonal balances crucial for reproductive health.

Spermatozoa BLK Spermatozoa BLK combines several herbs that aid in improving sexual function and enhancing fertility. ***Avena sativa*** is thought to free bound testosterone, enhancing available testosterone levels, thereby potentially increasing libido. ***Turnera diffusa*** and ***Pausinystalia yohimbe*** boosts erectile function and sexual arousal. ***Cinchona officinalis*** can help with muscle strength and coordination, enhancing general vitality, while ***Vitexagnus-castus*** regulates hormone levels, balancing reproductive hormones which can improve overall sperm health. This formulation aims to synergistically support sexual health and improve sperm parameters significantly. There are some studies in this similar disease that give us good data regarding the use of alternative medicines, these are as follows. Smith et al found that lifestyle interventions, including dietary adjustments, weight loss and reduced exposure to environmental toxins, led to significant improvements in sperm count and motility in men diagnosed with oligospermia.[12]The analysis by Majzoub and Agarwal reviewed several studies demonstrating that antioxidant supplementation in men with oligospermia could improve sperm quality by reducing oxidative stress.[13]Rossi et al wrote this systematic review concluded that supplementation with *Ashwagandha* improved sperm count, motility and morphology, thereby enhancing male fertility in patients with oligospermia.[14]Ferramosca et al in this study showed that men receiving these supplements experienced increased sperm motility and enhanced antioxidative defence, suggesting that targeted nutritional support could be beneficial in managing oligospermia.[15]Disanayake et al while primarily focusing on animal models, this research indicated that zinc supplementation improved testosterone levels and overall sexual behaviour, which correlates with improved sperm production in oligospermic males.[16]

Need for Further Research

Despite advancements in treating oligospermia, there remains a substantial need for further research to fully understand and address the multifaceted nature of this condition. Future studies should aim to elucidate the underlying genetic, environmental and

physiological contributors to oligospermia, exploring the interactions between lifestyle factors and genetic predispositions. Additionally, investigating the long-term efficacy and safety of various treatments, such as *ayurvedic* supplements and lifestyle modifications, across diverse populations is crucial. There is also a pressing need to develop more personalized medical interventions that consider individual differences in the pathophysiology of oligospermia. Enhanced research collaboration across disciplines, including urology, endocrinology and molecular biology, can foster innovative therapies, potentially improving treatment outcomes for affected individuals globally.

Conclusion

In conclusion, the presented case study of a 35-year-old male with oligospermia, treated through an integrative *Ayurvedic* approach, demonstrates significant improvements in both subjective and objective parameters. Pre-treatment, the patient had a sperm concentration of 1 million/mL, which post-treatment, increased dramatically to 35 million/mL. Additionally, the motility improved with actively motile sperm increased from 50% to 70%, non-progressive motility remained stable at 5%, and non-motile sperm reducing from 45% to 25%. Subjective health parameters also showed considerable enhancement; the Fatigue Severity Scale score decreased from 40 to 24, and the MRC Scale for Muscle Strength improved from 3 to 4. These outcomes not only highlight the potential of *Ayurvedic* medicine in improving sperm quality and overall vitality but also underscore the importance of a holistic treatment protocol that addresses lifestyle and dietary factors alongside targeted *ayurvedic* interventions. This case study reinforces the need for further clinical exploration and validation of traditional approaches within the context of modern reproductive health challenges, potentially offering wider treatment options for male infertility issues like oligospermia.

References:

1. World Health Organization. WHO laboratory manual for the Examination and processing of human semen. 5th ed. Geneva: World Health Organization; 2010.
2. Sharma PV. Sushruta Samhita. Vol 1. Varanasi: ChaukhambaVisvabharati; 2021.
3. Lad V. Textbook of Ayurveda. Volume 2. Albuquerque: Ayurvedic Press; 2006.
4. Dhiman K. Ayurvedic intervention in the management of Oligospermia: A case study. AYU. 2018;39(1):56-59.

5. Durairajanayagam D. Lifestyle causes of male infertility. Arab J Urol. 2018;16(1):10-20.

6. Levine H, Jørgensen N, Martino-Andrade A, et al. Temporal trends in sperm count: a systematic review and meta-regression analysis. Human Reprod Update. 2017;23(6):646-659.

7. Mishra S. Bhavaprakasha of Bhavamisra (Original work published in 1600 AD). Varanasi: ChaukhambaBharati Academy; 2019.

8. World Health Organization. WHO laboratory manual for the examination and processing of human semen. 5th ed. Geneva: World Health Organization; 2010.

9. Krupp LB, LaRocca NG, Muir-Nash J, et al. The fatigue severity scale. Application to patients with multiple sclerosis and systemic lupus erythematosus. Arch Neurol. 1989;46(10):1121-3.

10. Medical Research Council. Aids to the examination of the peripheral nervous system. London: Her Majesty's Stationery Office; 1981.

11. Manish, Chaudhary Gitika, Singh Suyash Pratap, Singh Manjeet, Richa. "Clinical Evaluation of Chronic Kidney Disease Management: Integrating Lifestyle Modification and Ayurveda." International Journal of AYUSH, Vol. 2013 No. 10, October 2024. DOI: 10.22159/prl.ijayush.v2013i10.1152

12. Smith JF, Eisenberg ML, Millstein SG, et al. "Sperm quality improvement after lifestyle modifications: A prospective study." *Fertility and Sterility* 2010;93(1):272-277

13. Majzoub A, Agarwal A. "Antioxidant therapy in male infertility: Fact or fiction?" *Journal of Assisted Reproduction and Genetics* 2017;34(7):907-915.

14. Rossi R, Kort DH, Henderson WC. "The effect of Ashwagandha (Withaniasomnifera) on male fertility: A systematic review." *Journal of Alternative and Complementary Medicine* 2018;24(10):980-987.

15. Ferramosca A, D'Angelo S. "Dietary supplementation with a combination of L-carnitine, l-acetyl-carnitine, and selenium improved sperm motility and protected against oxidative stress in men with oligospermia." *European Review for Medical and Pharmacological Sciences* 2016;20(4):764-771.

16. Dissanayake DM, Wijesinghe PS, Ratnasooriya WD, Wimalasena S. "Effects of zinc supplementation on sexual behavior of male rats." *Journal of Human Reproductive Sciences* 2009;2(2):57-61.

International Journal of AYUSH; 2025: 14 (02), 73-88

IJAYUSH
International Journal of AYUSH
AYURVEDA, YOGA, UNANI, SIDDHA AND HOMEOPATHY
http://internationaljournal.org.in/journal/index.php/ijayush/

International Journal
Panacea
Research library
ISSN: 2349 7025

Original Research Article | Volume 14 Issue 02 | February 2025

EFFECTIVE MANAGEMENT OF RENAL CALCULI (*MUTRASHMARI*) WITH AN AYURVEDIC TREATMENT: A CASE REPORT

Acharya Manish Ji [1], *Dr. Gitika Chaudhary [2], Dr. Richa[3], Dr. Himanshu Chawla[4]

[1]Director, Meditation Guru, Jeena Sikho Lifecare limited
[2]Senior Consultant, General Surgeon, BAMS, PGDIP, PGDGS, MS (Ay.), Jeena Sikho lifecare limited
[3]Research officer, BAMS, PGDIP, Jeena Sikho lifecare limited
[4]Consultant, BAMS, PGDIP, DNHE, Jeena Sikho lifecare limited Clinic Karol Bagh, Delhi

*Corresponding Author's Email id- shuddhi.research@jeenasikho.co.in

Abstract:

This case report evaluates the efficacy of *Ayurvedic* treatment in managing renal calculi, popularly known as kidney stones, which poses a significant global health issue. The patient, a 35-year-old male with a history of recurrent renal calculi, presented with symptoms including severe flank pain, nausea and intermittent painful urination. Diagnostic methods confirmed the presence of a 6.6 mm calculus at the left vesicoureteral junction. Utilizing a holistic *Ayurvedic* approach, the treatment strategy included a regimen of *ayurvedic* medications such as *MutravardhakVati, Stoni Cap*, and several others aimed at correcting physiological imbalances and enhancing the body's natural elimination processes. Over two months of treatment, significant clinical improvement was observed. Ultrasonography post-treatment showed complete dissolution of the renal calculus and subjective assessments reported a complete resolution of pain and gastrointestinal symptoms. The case underscores the potential of *Ayurvedic* medicine in treating renal calculi effectively, challenging the necessity for invasive procedures. It also highlights the importance of further scientific studies to validate these treatments, suggesting a need for rigorous controlled trials to establish a comprehensive, integrative approach to manage renal calculi effectively.

Keywords: - Renal Calculi, *Ayurveda*, *Mutrashmari*, Non-invasive Therapy

Introduction

Renal calculi or kidney stones, are prevalent urological condition affecting diverse populations around the globe. Epidemiological studies suggest that up to 12% of the global population will encounter renal stones at some point in their lifetime, with a high recurrence rate of nearly 50% within five years in the absence of preventive measures[1]. An upward trend in the incidence of kidney stones correlates with a rise in risk factors such as obesity and diabetes mellitus[2].

From a modern medical standpoint, kidney stones primarily consist of minerals like calcium oxalate, uric acid, struvite or cystine. These compositions relate directly to varying factors such as dietary habits, fluid consumption and genetic predispositions[3]. Typically, the clinical manifestation of renal calculi becomes evident when a stone obstructs part of the urinary tract, causing severe pain and often propelling individuals to seek medical assistance.

In classical *Ayurvedic* medicine, found extensively in the ancient texts of India, kidney stones are referred to as *"Mutrashmari"* (*'Mutra'* meaning urine, and *'Ashmari'* meaning stone). The traditional *Ayurvedic* texts describe the formation of these stones as a result of a disruption in the body's doshas - *Vata, Pitta* and *Kapha*[4]. It is particularly noted that an aggravation of the *Vata dosha* leads to disturbances in the *Pitta* and *Kapha doshas*, culminating in the crystallization of waste materials in the urinary system. This theory underscores a significant divergence from the biochemical perspective of modern medicine, offering a holistic approach to understand the ailment.

The *Ayurvedic* methodology in treating *Mutrashmari* encompasses a comprehensive treatment regime aimed at restoring the balance of *doshas*. This often includes dietary adjustments, lifestyle changes and the use of specific herbs known for their therapeutic properties. Notably, herbs such as *Gokshura* (Tribulusterrestris), *Varuna* (Crataevanurvala), and *Pashanabheda* (Bergenialigulata) are incorporated for their diuretic, lithotriptic (stone-breaking) and anti-inflammatory effects[5].

The exploration of renal calculi across both modern and *Ayurvedic* practices illuminates a multifaceted understanding of the condition, benefiting from both advanced scientific

research and centuries of traditional insights. Thus, a synergistic approach marrying these two perspectives may enhance the efficacy of treatments and broaden the scope of preventive strategies against this painful and recurrent disease.

Case Report

Patient History and Information: A 35-year-old male, non-smoker,been experiencing recurrent renal calculi for approximately 6-7 months. The patient presented with symptoms including right flank pain, nausea and intermittent painful urination. About a month prior to his current visit, he suffered from renal colic. Moreover, the patient reported experiencing stress and anxiety, general weakness and occasional gaseous distention. His appetite was noted to be reduced, though his bowel movements remained regular. There was no significant family history of similar conditions. Regarding previous treatments, the patient did not report any specific use of *Ayurvedic* or allopathic medications related to his condition prior to this consultation.

Diet and Lifestyle History: The patient had a regular diet without specific dietary modifications and was living a moderately active lifestyle.

Surgical History: No significant surgical history was reported.

Medicine History: He has not been on constant medication prior to this episode, nor has been diagnosed nor treated for other systemic diseases.

Family History: There is no known family history of renal calculi or related metabolic disorders.

Onset and Progression of the Disease: The patient first noted symptoms of renal calculi approximately 6-7 months ago. The initial symptoms were less severe but have progressively worsened, leading to several episodes of noticeable pain and discomfort, culminating in an acute episode of renal colic one month prior to his current presentation.

Vital Parameters: Upon examination, the patient's vital signs were within normal limits. Blood pressure, heart rate, respiratory rate and temperature were all recorded and found to be stable, reflecting no immediate distress or systemic infection.

Ayurvedic Examination

Table 1. DashavidhaPariksha (Ten-fold Examination)

Sr. No	Examination	Findings
1.	***Prakriti*** **(Constitution):**	*Vata Pitta*
2.	***Vikriti*** **(Imbalance)**:	*Vata Kapha*
3.	***Sara*** **(Tissue Excellence)**:	*Madhyam*
4.	***Samhanana*** **(Body Build)**:	Moderate
5.	***Pramana*** **(Body Proportions)**:	Within normal limits.
6.	***Satmya*** **(Adaptability)**:	Moderate
7.	***Satva*** **(Psychological Strength)**:	*Madhyam*
8.	***Ahara Shakti*** **(Digestive Strength)**:	*Madhyam*
9.	***Vyayama Shakti*** **(Exercise Capacity)**:	Moderate
10.	***Vaya*** **(Age)**:	*Madhyam*

Systemic Examination

1. **General Appearance**: No visible abnormalities
2. **Cardiovascular System (CVS)**: No Abnormality detected.
3. **Respiratory System (RS)**: Normal breath sounds.
4. **Gastrointestinal System (GIT)**: Gaseous Distension occasionally
    a. Abdominal Inspection: No abnormalities such as distension, visible masses or no scars were noted.
    b. Abdominal Palpation: The abdomen was soft, non-tender, with no palpable masses or no organ enlargement observed. Dull Pain in the left iliac region.

c. Abdominal Auscultation: Bowel sounds were regular, indicating normal bowel motility and function.
d. Percussion: Revealed normal tympany and dullness, suggesting healthy organ anatomy.

5. **Central Nervous System (CNS)**: Stress, Anxiety
6. **Skin**: No Abnormality detected

Ayurveda Samprapti

In Ayurveda, the condition of renal calculi, known as *Mutrashmari*, is understood through a detailed pathogenesis involving the *doshas, dhatu* (tissues) and *malas* (waste products). Primarily, the disturbance in *Apana Vayu*, a subtype of *Vata* dosha responsible for downward movement and elimination processes, leads to improper evacuation and dryness in the urinary tract, facilitating mineral crystallization. Secondary contributions may come from *Pitta*, promoting acidic urine conducive to uric acid stones, and *Kapha*, leading to calcium-enriched urine resulting in calcium oxalate stones. The involvement of *Meda* (fatty tissue) and *Asthi* (bone tissue) *dhatus* indicates metabolic dysfunctions influencing mineral balance in the body. Furthermore, improper digestion due to imbalanced *Jatharagni* (digestive fire), especially in the stomach and intestines, can result in the production of *Ama* (toxins), promoting stone formation.

***SamprаptiGhataka* :**

1. ***Dosha–VataPittaja***
2. ***Dushya – Rasa Rakta***
3. ***Agni – Manda* (Less)**
4. ***Avastha – Jeerna* (Chronic)**
5. ***Rog Marga - Madhyama***
6. ***SadhyaAsadhyatva - Sadhya***

Diagnostic Assessment:

Ultrasonography of the abdomen confirmed the dilated pelvicalyceal system(mild-grade) and ureter and presence of a 6.6 mm calculus at the leftVU junction. No hydronephrosis was observed.

Image 1 – Before Treatment

Zaina Diagnostic & Imaging Centre

ULTRASOUND, COLOUR DOPPLER, DIGITAL X-RAY, OPG, ECG, ECHO & PATH LAB

Patient Name :
Age / Gender : 35 years / Male
Collection Time : Aug 29, 2023, 10:12
Referral : Self
Patient ID : 30605
Reporting Time : Aug 29, 2023, 10:33

RADIOLOGY

USG WHOLE ABDOMEN (MALE)

LIVER: Normal in size (12.5 cm), shape and echotexture. No focal or diffuse lesion/SOL seen. Hepatic veins radicals are normal No dilated Intra-hepatic biliary radicals seen. Portal vein is normal.

GALL BLADDER : Gall Bladder is distended , lumen is normal . GB wall is normal. Common bile duct is normal.

PANCREAS: Normal in size, shape & echo-texture. Pancreatic duct is not dilated.

SPLEEN:Normal in size (9.5 cm) shape and & echotexture, no evidence of any focal or diffuse lesion. Splenic vein is not dilated.

KIDNEYS: (Rt kidney -92 x 42 mm , Lt kidney - 99 x 45mm)
Left Kidney - Evidence of dilated pelvicalyceal system (mild grade) and ureter and a calculus (6.6mm) in left VU junction of the ureter.
Rt Kidney - normal in size, shape & echo-texture with clear differentiation between cortex & medulla. No stone/mass or hydronephrosis seen. Pelvi-calyceal system is normal. No dilatation of upper 1/3 rd of both ureters seen. No Perinephric fluid collection seen.

URINARY BLADDER: Distended,wall thickness is normal. No stone / mass/ diverticula.

PROSTATE: Normal in size ,shape and echotexture

OTHERS: No evidence of lymphadenopathy or mass lesion in retroperitoneum.
No free fluid is seen in peritoneal cavity.
Visualized bowel loop appear normal.

Correlate clinically

Dr. Nadeem ul Islam
MBBS, DMRD
DMC-26571

Treatment Plan

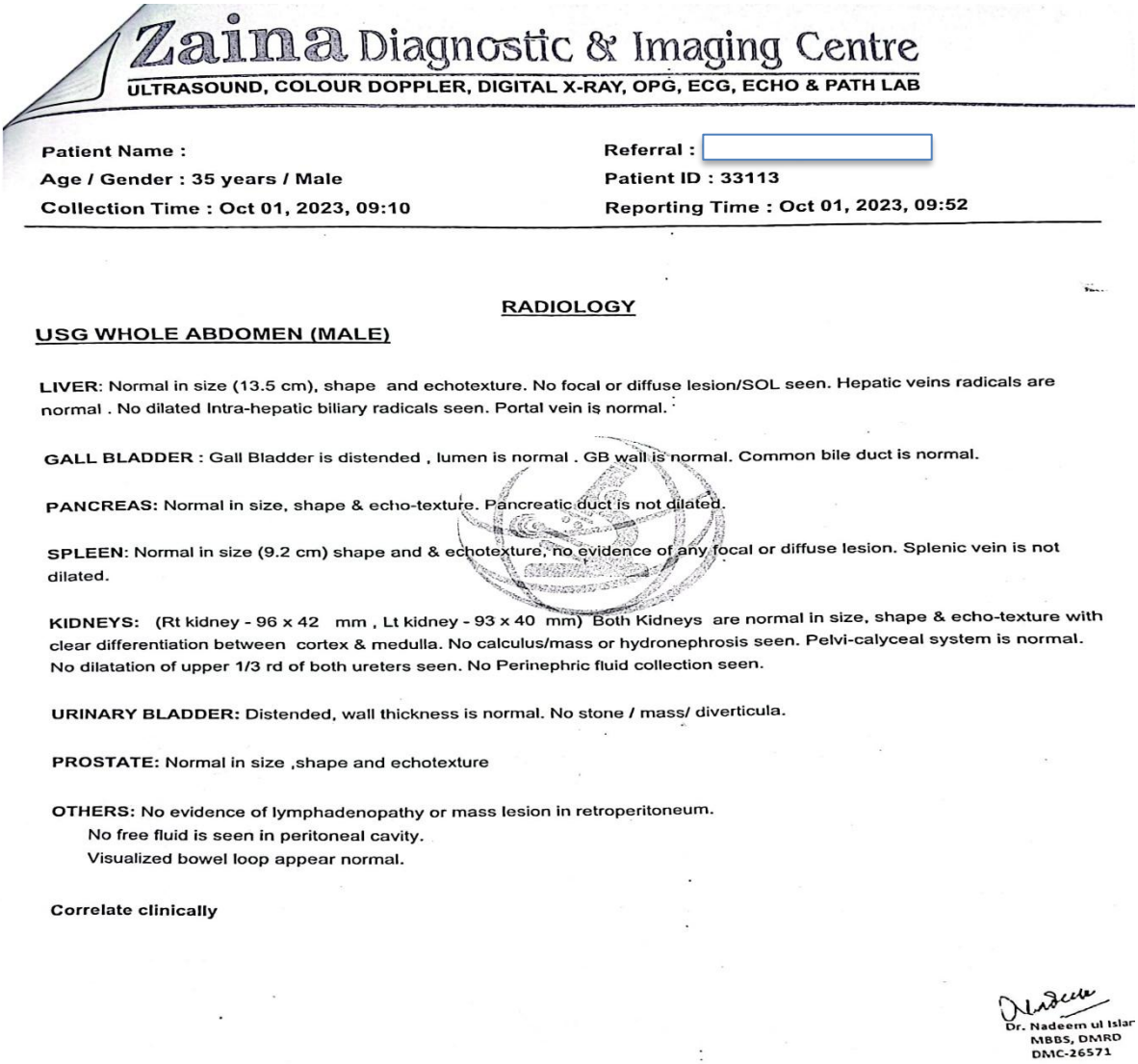
I. Diet Plan:[10]

The dietary guidelines provided by Jeena Sikho Lifecare Limited Clinic Karolbagh include the following key recommendations:

a. Foods to be avoided:

- Do not consume wheat, refined food, milk and milk products, coffee and tea and packed food.
- Avoid eating after 8 PM.
- During solid consume as small bite and chew 32 times.

Image 2 – After Treatm



Zaina Diagnostic & Imaging Centre

ULTRASOUND, COLOUR DOPPLER, DIGITAL X-RAY, OPG, ECG, ECHO & PATH LAB

Patient Name :
Referral :
Age / Gender : 35 years / Male
Patient ID : 33113
Collection Time : Oct 01, 2023, 09:10
Reporting Time : Oct 01, 2023, 09:52

RADIOLOGY

USG WHOLE ABDOMEN (MALE)

LIVER: Normal in size (13.5 cm), shape and echotexture. No focal or diffuse lesion/SOL seen. Hepatic veins radicals are normal . No dilated Intra-hepatic biliary radicals seen. Portal vein is normal.

GALL BLADDER : Gall Bladder is distended , lumen is normal . GB wall is normal. Common bile duct is normal.

PANCREAS: Normal in size, shape & echo-texture. Pancreatic duct is not dilated.

SPLEEN: Normal in size (9.2 cm) shape and & echotexture, no evidence of any focal or diffuse lesion. Splenic vein is not dilated.

KIDNEYS: (Rt kidney - 96 x 42 mm , Lt kidney - 93 x 40 mm) Both Kidneys are normal in size, shape & echo-texture with clear differentiation between cortex & medulla. No calculus/mass or hydronephrosis seen. Pelvi-calyceal system is normal. No dilatation of upper 1/3 rd of both ureters seen. No Perinephric fluid collection seen.

URINARY BLADDER: Distended, wall thickness is normal. No stone / mass/ diverticula.

PROSTATE: Normal in size ,shape and echotexture

OTHERS: No evidence of lymphadenopathy or mass lesion in retroperitoneum.
No free fluid is seen in peritoneal cavity.
Visualized bowel loop appear normal.

Correlate clinically

Dr. Nadeem ul Islar
MBBS, DMRD
DMC-26571

b. Hydration:

- During water intake, take sip by sip and drink slowly to ensure the amount of water intake each time.
- Drink about 1 liter of alkaline water 3 to 4 times throughout the day.
- Include Herbal tea, living water and turmeric-infused water part of daily routine.
- Boil 2 litersof water & reduce up to 1 liter and consume.

c. Millet Intake:

- Incorporate five types of millet into your diet: Foxtail (*Setariaitalica*), Barnyard (*Echinochloaesculenta*), Little (*Panicumsumatrense*), Kodo (*Paspalumscrobiculatum*) and Browntop (*Urochloa ramose*).

- Use only steel cookwares for preparing the millets
- Cook the millets only using mustard oil.

d. Meal Timing and Structure:

1. Early Morning (5:45 AM): Herbal tea, curry leaves (1 leaf-1 min/5 leaves-5 min) along with raw ginger and turmeric.
2. Breakfast (9:00-10:00 AM): The patient had given steamed fruits (Seasonal), steamed sprouts (according to the season) and a fermented millet shake (4-5 types).
3. Morning Snacks (11:00AM): The patient had given Red juice (150 ml) and soaked almonds.
4. Lunch (12:30 PM - 2:00 PM): The patient had received Plate 1 and Plate 2. Plate 1 will include a steamed salad, while Plate 2 with cooked millet-based dish along with raw ginger and turmeric.
5. Evening Snacks (4:00 – 4:20 PM): Green juice (100-150 ml) along with 4-5 almonds.
6. Dinner (6:15-7:30 PM): The patient had served a steamed salad, chutney and soup, as Plate 1, along with millet khichdi as Plate 2 along with raw ginger and turmeric.

e. Fasting:

- It is advised to observe one-day fasting.

f. Special Instructions:

- Express gratitude to the divine before consuming food or drinks.
- Sit in *Vajrasana* (a yoga posture) after each meal.
- 10 minutes slow walk after every meal.

g. Diet Types:

- The diet comprises salt-less solid, semi-solid and smoothie options.
- Suggested foods include Herbal tea, red juice, green juice, a variety of steamed fruits, fermented millet shakes, soaked almond and steamed salads.

II. Lifestyle Recommendations were-

(i) Include meditation for relaxation.

(ii) Practice barefoot brisk walk for 30 minutes.

(iii) Ensure 6-8 hours of quality sleep each night.

(iv) Adhere to a structured daily routine.

Medicines

Table 2. First month – 28/08/2023

Medications	Dose	Anupana	Duration
MutravardhakVati	1 Tab BD	Lukewarm Water (*KoshnaJala*)	*Adhobhakta* (After Meal)
Stoni Cap	1 Cap BD	Lukewarm Water (*KoshnaJala*)	*Adhobhakta* (After Meal)
GIT Stimulator Syp	10 ml BD	Equal Amount of Lukewarm Water (*Sama Matra Koshna Jala*)	*Pragbhakta*(Before Meal)
BramhiVati	1 Tab BD	Lukewarm Water (*KoshnaJala*)	*Adhobhakta* (After Meal)

Table 3. Second Month – 30/09/2023

Medications	Dose	Anupana	Duration
Stoni Cap	1 Cap BD	Lukewarm Water (*KoshnaJala*)	*Adhobhakta* (After Meal)
MutravardhakVati	1 Tab BD	Lukewarm Water (*KoshnaJala*)	*Adhobhakta* (After Meal)
Amlapittanashak Cap	1 Cap BD	Lukewarm Water (*KoshnaJala*)	*Pragbhakta* (Before Meal)
GIT Stimulator Syp	10 ml BD	Equal Amount of Lukewarm Water (*Sama Matra Koshna Jala*)	*Pragbhakta* (Before Meal)

Follow-up and Outcomes:

After 2 months of *Ayurvedic* treatment, the results that were seen are-

Table 4 – Outcomes – Objective Parameters

Parameters	Pre-Treatment	Post-Treatment
Ultrasonographic Evaluation	Ultrasonography identified a 6.6 mm calculus at the left vesicoureteral (VU) junction.	Follow-up ultrasonography showed complete dissolution of the renal calculus.
Reduction in Gallstone Size	Average stone size 6.6 mm	No renal stones
Blood Pressure:	Recorded at 140/90 mmHg, indicating pre-hypertension	Normalized to 120/80 mmHg, within normal limits.

The changes in the subjective parameters that was observed are-

Table 5- Outcomes – Subjective Parameters

Parameters	Pre-Treatment	Post-Treatment
Pain Severity (VAS)	Patient reported severe pain, rated at 8 on a scale of 1-10 during episodes of renal colic.	Complete resolution of pain, rated at 0 on a scale of 1-10.
Gastrointestinal Symptoms:	Occasional gaseous distension and dull pain in the left iliac region.	Significant improvement in GI symptoms, with no reports of gaseous distension or abdominal pain

Discussion:

The management of renal calculi or *Mutrashmari,* through *Ayurvedic* treatment hinges on the concept of restoring balance among the *doshas* and cleansing the *strotas* (channels) to prevent the formation and facilitate the dissolution of stones. This case provides a significant example of how *Ayurvedic* formulations, combined with dietary and lifestyle modifications,

can serve as effective non-invasive treatments for renal calculi, potentially lowering the need for surgical interventions.

Contemporary research aligns with the efficacy of certain *Ayurvedic* herbs used in the treatment described. *Gokshura* (Tribulusterrestris) is acknowledged for its lithotriptic properties, enhancing urine output and solubilizing minerals in the urine, thereby preventing the aggregation into stones[6]. Similarly, the *Varuna* (Crataevanurvala) plant has been recognized for its nephroprotective and anti-urolithiatic activities due to its potent antioxidant properties[7]. *Pashanabheda* (Bergenialigulata) has been traditionally used for its effects on breaking down renal stones and facilitating their expulsion by modulation of the crystalloid-colloid imbalance[8].

The pharmacological actions of the medications used can be linked to their roles in breaking the *Samprapti* (pathogenesis) of *Ashmari.* MutravardhakVati and Stoni Cap, likely containing ingredients, aids in managing *Vata* and *Pitta dosha*, thus addressing the root causes by enhancing the digestive fire (*Agni*) and preventing crystallization of waste materials (*Ama*) in the urinary tract. These actions help in dissolving the existing stones and prevent new stone formation by balancing the metabolic activities and normalizing urine chemistry.

Furthermore, improved digestive strength (*Agni*) and GIT function suggested by cessation of gaseous distension symptoms may also indirectly support the elimination of toxins and prevent further stone formation. The use of Bramhi Vati and GIT Stimulator Syp could enhance psychological wellbeing and manage stress, which is vital because psychological stress can exacerbate *Vata dosha*, contributing to further physiological imbalances[9].

The mechanism of action of the medicines that is used in this case are

- ***Mutravardhak*Vati** - *MutraVardhakVati* is an *Ayurvedic* formulation designed primarily to enhance urinary tract function and promote renal health. ***Gokhru*** is a key ingredient known for its diuretic properties, helps to increase urine output and manage kidney disorders. ***Guggul*** contributes anti-inflammatory and lipid-lowering effects, beneficial for overall kidney function. ***Sonth* (dried ginger), *Kalimirch* (black pepper) and *Pippali* (long pepper)** act synergistically to improve digestion and enhance the bioavailability of other *ayurvedic* components. ***Bahera, Harad and Amla*** form the trio known as *Triphala*, revered for its balancing effect on the *doshas* and its supportive role in detoxification and rejuvenation. ***Motha* (Nut grass)** aids in soothing urinary disorders and enhancing bladder health. Together, these

components of MutraVardhakVati work in harmony to support the kidneys' filtration capacity, reduce inflammation and promote overall urinary system health, making it an effective supplement for managing urinary tract disorders and supporting kidney function.

- **Stoni Cap** - Stoni Capsules are designed as an *Ayurvedic* formulation specifically aimed at preventing and dissolving kidney stones. The formulation combines various herbs and minerals known for their lithotriptic and diuretic properties. ***PashanBhed*** and ***Gokhru Chota*** are central to this formulation, known for their ability to dissolve stones and clear gravel from the urinary tract. ***Kulthi*** (Horse gram) is used for its benefits in breaking down renal stones. ***Pather bar***, ***Elaichi Badi*** (Greater Cardamom) and ***Jawakhar*** (Potash alum) works synergistically to cleanse the urinary system and soothe the urinary tract. ***Akshar*** further aids in the removal of stones. ***ShudhShilajeet*** acts as a rejuvenator, enhancing the repair of urinary organs, while ***HazralYahudBhasam*** helps in regulating urinary pH and reducing stone formation. Together, these ingredients work to effectively manage and prevent the formation of kidney stones, enhancing kidney health and promoting natural stone expulsion.
- **GIT Stimulator Syp** - The G.I.T. Stimulator Syp is a comprehensive Ayurvedic formulation designed to enhance overall digestive health. It blends numerous herbs such as ***Kutaj***, ***Chitrak*** and ***Nagarmotha*** for their abilities to regulate digestion and combat diarrhoea. Cooling agents like ***Ushir*** and ***Chandan*** soothe the stomach lining, while ***Kali Mirch*** and ***Haldi*** stimulates digestive enzymes, improving digestion and absorption. ***Vidanga*** and ***Chirata*** are included for their antiparasitic effects, enhancing gastrointestinal cleansing. Additionally, calming herbs such as ***Jatamansi*** and ***Tagar*** helps to manage stress-related digestive issues, contributing to a balanced digestive function. This formulation is well-rounded, targeting digestive efficiency, soothing irritation and providing anti-inflammatory benefits, making it ideal for maintaining a healthy gastrointestinal tract.
- **Brahmi Vati** - *Brahmi Vati* is a classical Ayurvedic formulation utilized for enhancing cognitive functions and managing stress-related disorders. The primary ingredient, ***Brahmi***, is well-known for its neuroprotective properties that enhance memory and cognitive function. ***Ras-sindur*** (purified mercury) is used in trace amounts for its revitalizing and detoxifying effects on the nervous system. ***Shilajeet*** contributes rejuvenating properties, improving overall vitality and stamina. ***Kalimirch*** **(Black**

pepper), ***Vayavidanga*** and ***Pippali*** **(Long pepper)** are included to enhance digestion and bioavailability of other ingredients, promoting better assimilation and effectiveness. ***AbhrakBhasma*** and ***Vang Bhasma*** are mineral preparations added for their therapeutic effects on mental agility and nervous system health. Collectively, this formulation supports mental acuity, manages stress, and improves overall brain health, positioning Brahmi Vati as a beneficial adjunct in the management of cognitive disorders and mental fatigue.

- **Amlapittanashak Cap** – AmlapittNashak Cap is formulated primarily to address hyperacidity and related digestive complaints. ***Mulethi*** **(Licorice)** acts as a soothing agent, reducing gastric irritation and protecting the mucosal lining. ***Pudina*** **(Mint)** offers a cooling effect and helps to alleviate stomach discomfort. ***Hing*** **(Asafoetida)** and ***Jeera*** **(Cumin)** are known for their carminative properties that enhance digestion and reduce gas formation. ***Chitrak*** *and* ***Ajwain*** **(Carom seeds)** stimulates digestive enzymes, aiding in effective digestion and relief from indigestion. ***Marich*** **(Black pepper),** ***Pipal*** **(Long pepper) and** ***Shunthi*** **(Dried ginger)** collectively enhance gastrointestinal motility and improve absorption, thus reducing acidity. ***Amla, Haritaki*** and ***Vibhitak*** forms *Triphala,* which is revered in *Ayurveda* for its balancing properties on the *doshas* and its beneficial effects on the stomach and intestines. ***ShankhBhasam*** is an antacid that neutralizes stomach acid, providing relief from heartburn. ***Bhawnadravya***, a liquid media used during the processing of these tablets, incorporates additional *ayurvedic* extracts that synergize and augment the tablet's efficacy. Together, these ingredients make AmlapittNashak Cap, effective in managing acidity, promoting digestion and maintaining overall gastrointestinal health.

A key consideration in *Ayurvedic* treatment is its holistic approach, focusing not only on treating the disease but also on promoting overall health. This case demonstrates improvement in both specific symptoms related to renal calculi and general health parameters such as blood pressure and stress levels, reflecting the comprehensive nature of *Ayurvedic* treatment.

As renal calculi are becoming more common due to lifestyle and dietary factors, an effective, non-invasive treatment option like *Ayurveda* could be of significant interest.

In summary, the patient's recovery can be attributed to the strategic use of *Ayurvedic* formulations designed to break the pathogenesis cycle (*SamptiVighatana*) of

Mutrashmari, coupled with improvements in lifestyle and dietary habits. The results recommend a deeper scientific exploration into the mechanisms and efficacy of these treatments.

Need for Further Research

The promising outcomes demonstrated in this case report necessitate further scientific exploration into *Ayurvedic* treatments for renal calculi. Crucially, there is a need for rigorous randomized controlled trials to reliably compare the efficacy and safety of *Ayurvedic* interventions against standard medical treatments. Additionally, in-depth studies into the pharmacological mechanisms of action of *Ayurvedic* herbs could enhance understanding and optimize therapeutic protocols. Longitudinal research is also required to assess the long-term effectiveness of these treatments and their impact on stone recurrence. Moreover, integrating *Ayurvedic* practices with conventional medical approaches may offer more comprehensive care models. Finally, expanding research to include diverse demographic groups would help to tailor therapies to different population needs, enhancing the applicability and effectiveness of *Ayurvedic* treatments for renal calculi globally.

Conclusion:

The effective management of renal calculi in this patient through *Ayurvedic* practices exemplifies the profound capabilities of traditional medical systems in addressing modern health concerns. Within a six-week treatment framework, the patient achieved complete dissolution of a 6.6 mm renal calculus, an impressive outcome underscoring the treatment's efficacy. Additionally, there was a normalization of the patient's blood pressure and resolution of his gastrointestinal symptoms, further demonstrating the holistic benefit of the *Ayurvedic* approach.

This clinical success can be attributed to the multifaceted *Ayurvedic* treatment regimen tailored to the patient's specific condition, which focused on correcting physiological imbalances and addressing both the symptoms and underlying causes of *Mutrashmari* (renal calculi). The *Ayurvedic* interventions were carefully designed to disrupt the pathogenesis of the disease by balancing the *doshas* involved, enhancing the digestive fire (*Jatharagni*) and facilitating the elimination of toxins that contribute to stone formation.

Investigations prior to initialization of the treatment confirmed the presence of the calculus and helped in tailoring the intervention precisely. Over the course of treatment, follow-up

assessments were crucial in monitoring the reduction in stone size and the improvement in vital parameters, confirming both the disappearance of the kidney stone and the restoration of health markers such as blood pressure.

In conclusion, the holistic and individualized approach of *Ayurveda* not only addressed the immediate clinical symptoms presented by the renal calculi but also promoted an overall enhancement of health, validating the integration of traditional medicinal practices with modern clinical methods to provide comprehensive patient care.

References

1. Scales CD Jr, Smith AC, Hanley JM, Saigal CS; Urologic Diseases in America Project. Prevalence of kidney stones in the United States [Internet]. Eur Urol. 2012 Jul;62(1):160-5. Available from: doi: 10.1016/j.eururo.2012.03.052
2. Romero V, Akpinar H, Assimos DG. Kidney stones: a global picture of prevalence, incidence, and associated risk factors [Internet]. Rev Urol. 2010;12(2-3): e86-96. Available from: PMID: 20811557
3. Taylor EN, Stampfer MJ, Curhan GC. Dietary factors and the risk of incident kidney stones in younger women: Nurses' Health Study II [Internet]. Arch Intern Med. 2004 Apr 26;164(8):885-91. Available from: DOI:10.1001/archinte.164.8.885
4. Sharma P, Sharma A. Concept of Mootrashmari (Urolithiasis) in Ayurveda [Internet]. J ClinDiagn Res. 2015 Jun; 9(6): LE01–LE03. Available from: doi:10.7860/JCDR/2015/12851.6022
5. Sabnis M. Role of Ayurveda in management of urolithiasis [Internet]. J Ayurveda Integr Med Sci. 2017; 2(2):32-41. Available from: https://jaims.in/index.php/jaims/article/view/396
6. Aggarwal A, Singla SK, Gandhi M, Tandon C. Review on the Pharmacological Properties of Tribulus terrestris. Ethnopharmacol. 2012;141(1):201-210. doi: 10.1016/j.jep.2012.02.048^1.
7. Singh AP, Singh N, Pathak D. Role of CrataevaNurvala in the Management of Urinary Tract Disorders. Ther Adv Urol. 2015;7(6):360-367. doi:10.1177/1756287215597634^2.

8. Pareta SK, Patra KC, Mazumder PM, Sasmal D. Ethnopharmacological and Phytochemical Review of All Five Species of Bergenia Available Worldwide. J Ethnopharmacol. 2011;134(3):679-688. doi: 10.1016/j.jep.2010.12.038^3.

9. Gupta P, Rana A. Clinical assessment of the effect of Brahmi Vati on stress and anxiety disorders. Ayu. 2010;31(2):236-240. doi:10.4103/0974-8520.72395^4.

10. Manish, Chaudhary Gitika , Singh Suyash Pratap , Singh Manjeet , Richa. "Clinical Evaluation of Chronic Kidney Disease Management: Integrating Lifestyle Modification and Ayurveda." International Journal of AYUSH, Vol. 2013 No. 10, October 2024. DOI: 10.22159/prl.ijayush.v2013i10.1152

Annexure C

IJAYUSH
International Journal of AYUSH
AYURVEDA, YOGA, UNANI, SIDDHA AND HOMEOPATHY
http://internationaljournal.org.in/journal/index.php/ijayush/

International Journal
Panacea
Research library
ISSN: 2349 7025

Original Research Article | Volume 14 Issue 02 | February 2025

MANAGEMENT OF EARLY-STAGE BREAST CANCER WITH AYURVEDA: A CASE STUDY

Acharya Manish[1], *Dr. Gitika Chaudhary [2], Dr. Richa[3], Dr. Garima[4], Dr. Neha Sharma[5]

[1]Director, Meditation Guru, Jeena Sikho Lifecare limited

[2]Senior Consultant, General Surgeon, BAMS, PGDIP, PGDGS, MS (Ay.), Jeena Sikho lifecare limited

[3]Research officer, BAMS, PGDIP, Jeena Sikho lifecare limited
[4]Consultant, BAMS, Jeena Sikho lifecare limited

[5]Study Physician, BAMS Jeena Sikho lifecare limited

***Corresponding Author-** Dr. Gitika Chaudhary, Senior Consultant, General Surgeon, BAMS, PGDIP, PGDGS, MS (Ay.), Jeena Sikho lifecare limited

Email id- shuddhi.research@jeenasikho.co.in

Abstract

Breast cancer is the most commonly diagnosed cancer worldwide, with over 2.3 million new cases and 685,000 deaths reported in 2020, and its incidence is projected to increase to over 3 million new cases annually by 2040. In India, the number of breast cancer cases are rising, with an estimated 200,000 women expected to be affected annually by 2030, particularly among postmenopausal women. Ductal carcinoma, the most prevalent form of breast cancer, accounts for 85-90% of all cases. Ayurveda offers a holistic approach in managing breast cancer, focusing on restoring the balance of *Doshas*, addressing the underlying factors contributing to abnormal cell growth and mitigating chemotherapy side effects. This case study investigates the effects of Ayurvedic treatment on a 65-year-old female diagnosed with low-grade ductal carcinoma of the left breast. The patient presented with burning sensation, swelling and pain in the affected breast, alongside constipation and heartburn. After receiving a comprehensive Ayurvedic treatment plan, including Panchakarma therapies and Ayurvedic formulations, at Shuddhi Ayurveda Panchakarma Hospital in Navi Mumbai, significant improvements were observed. The patient experienced relief from symptoms, including a 70% reduction in the burning sensation, enhanced energy levels and better

digestive health. Follow-up PET CT scans showed a notable reduction in the size of the lesion and no new metastases, suggesting a positive response to the Ayurvedic treatment. The study highlights the potential of Ayurveda as an adjunctive therapy in managing breast cancer, providing symptomatic relief and improving the overall quality of life. However, given the limited sample size, further randomized controlled trials and larger cohort studies are necessary to validate the efficacy and safety of integrated Ayurvedic treatments and establish standardized therapeutic guidelines for cancer care. This study underscores the importance of combining Ayurvedic and Allopathic medical approaches to optimize patient outcomes and enhance holistic care in cancer management.

Keywords

Breast Cancer, Multidisciplinary care, Low-grade cancer, Ayurveda, Panchakarma, *Arbud, Granthi*

Introduction

Breast cancer is the most commonly diagnosed cancer worldwide, with over 2.3 million new cases and 685,000 deaths estimated in 2020. The burden of breast cancer is expected to grow to over 3 million new cases per year by 2040[1]. In India, the incidences of breast cancer are rising, with an estimated 200,000 women expected to be affected annually by 2030. The highest incidences are seen in postmenopausal women [2]. Breast tumors most commonly affect the upper outer quadrant of the breast, which is also a common site for benign breast conditions such as fibro adenoma and breast cysts [3].

According to the GLOBOCAN (global cancer burden) 2020 report, breast cancer accounts for 24.5% of all new cancer cases and is responsible for 15.5% of cancer-related deaths among the female population worldwide [4]. This highlights the significant global health burden of breast cancer and the necessity for a holistic approach to treatment.

Ductal carcinoma of the breast is the most common form of breast cancer, accounting for 85-90% of all cases. Approximately 1 in 28 women are expected to develop breast cancer during their lifetime[5]. According to the World Health Organization (WHO), several risk factors contribute tothe breast cancer, including increasing age, obesity, harmful use of alcohol, family history, history of radiation exposure, reproductive factors, tobacco use and postmenopausal hormone therapy.

Ayurveda suggests that improper *Aahar* and *Vihar* can disturb the balance of *Doshas*, increasing the risk of diseases like *Granthi* and *Arbuda*, which can be correlated with cancer.

Although breast cancer is primarily *Kapha*-predominant, there is always an association of *Vata*, leading to abnormal cell multiplication, while *Dhatvagni* (tissue metabolism) is also diminished. *AyurvedicChikitsa* focuses on correcting these factors involved in the *Samprapti* of such diseases.

Ayurveda provides a holistic approach to manage breast cancer by improving the quality of life and mitigating chemotherapy side effects. Recent studies suggest that Ayurvedic interventions can reduce adverse effects and enhance immune responses in patients undergoing chemotherapy. Key interventions include Ayurveda-mineral formulations, which helps to alleviate nausea and fatigue [6], and palliative care measures, which strengthen overall well-being [7]. Ayurveda, with its 5,000-year-old history, emphasizes Ayurvedic medicines and lifestyle modifications for health and longevity[8]. A recent case study highlights a low-grade ductal breast carcinoma that responded well to Ayurvedic treatment without surgical resection or conventional therapy, demonstrating the potential of Ayurveda in managing such conditions. This study examines the impact of Ayurvedic treatments on a 65-year-old female with breast lower grade carcinoma.

CASE REPORT

A 65-year-old female with left breast lower grade carcinoma visited Shuddhi Ayurveda Panchakarma Hospital, Navi Mumbai,Maharashtra on November 26, 2022. The major complaints were burning sensation, tenderness, swelling and pain at left breast for two months. On examination hard and mild movable lump was felt. Other associated complaints were constipation, gases and heartburn. Her appetite and sleep patterns were normal. Stress factor was also noted.

She gave history of Hypertension and Migraine since last 10 years, for which she was under modern medication. She had past history of Angioplasty twice and Hysterectomy. Her 2D Echo study done in September 2022 was normal with LVEF being 60%. Patient was diagnosed with COVID in 2020. The patient was suffering with constipation since last 10 years. Patient was not willing for surgical resection or any other conventional treatment. Initial assessment details during the visits are mentioned in **Table 1.**

The allopathic medications consumed by the patient were Telmisartan (40mg) + Hydrochlorothiazide (12.5mg), Nitroglycerin (2.5mg), Cilnidipine (10mg), Atorvastatin (20mg), Clopidogrel (75mg) and Aspirin (150mg). A whole-body PET scan was done on November 24, 2022 and December 23, 2023.

Table 1.Initial assessment details during the visits

Date	Blood Pressure (mmHg)	Weight	Pulse/ Min	SpO2	Temperature
26-11-2022	130/90	58.3 Kg	86	98%	-
02-12-2022	120/70	56.2 Kg	86	80%	-
03-12-2022	130/70	56.6 Kg	79	97%	-
04-12-2022	110/70	55.1 Kg	86	97%	98 ˚F
05-12-2022	120/70	55.3 Kg	84	97%	98 ˚F
06-12-2022	130/70	56.4 Kg	74	98%	96 ˚F
07-12-2022	120/70	55.5 Kg	73	99%	93 ˚F
08-12-2022	140/70	55.4 Kg	79	98%	97 ˚F
10-12-2022	140/80	56 Kg	81	99%	94.6 ˚F
18-03-2023	150/90	50 Kg	88	92%	-

The patient was admitted for IPD from December 02, 2022 and received 10 days of IPD at Shuddhi Ayurveda Panchakarma Hospital, Navi Mumbai, Maharashtra, following a comprehensive Ayurvedic treatment plan. The daily vitals during the IPD are mentioned in **Table 2.**The treatment plan included Panchakarma therapies such as *Shirodhara* with *Brahmi oil*, *Lepam* with *Dashanga*, *Parisheka* with *Dhanyamla* and *MatraBasti* with *Sahacharadioil*. The patient later discharged on December 13, 2022. The discharge vitals are mentioned in **Table 3**. *Ashtasthanapareeksha* during the discharge is mentioned in **Table 4**.

Table 2 The daily vitals during the IPD

Date	Time	Temperature	Blood Pressure	Pulse/min	SpO2
02-Dec-22	10:00 AM	97.2˚ F	120/70 mmHg	86	80%
03-Dec-22	9:50 AM	97.2˚ F	130/70 mmHg	79	97%
04-Dec-22	9:30 AM	98˚ F	110/70 mmHg	86	97%
05-Dec-22	9:00 AM	98˚ F	130/80 mmHg	86	98%
06-Dec-22	9:00 AM	96.2˚ F	130/80 mmHg	74	98%
07-Dec-22	9:55 AM	94˚ F	122/72 mmHg	74	99%
08-Dec-22	8:55 AM	97˚ F	140/70 mmHg	79	98%
10-Dec-22	9:00 AM	94.6˚ F	140/84 mmHg	81	99%
11-Dec-22	9:00 AM	97.4˚ F	100/80 mmHg	74	98%
13-Dec-22	9:20 AM	97˚ F	100/80 mmHg	82	98%

Table 3 The discharge vitals

Parameter	Findings
Blood Pressure	130/80 mmHg
Pulse rate	79/min
Weight	56 Kg

Table 4 *Ashtasthanapareeksha* during the discharge

Parameter	Findings
Naadi	*VatajPittaj*
Mala	*Abadha*
Mutra	*Avikrita*
Jiwha	*Saam*
Shabda	*Spashta*
Sparsha	*Samsheetoshna*
Akriti	*Madhyam*
Drika	*Avikrita*

Material and Method

Treatment Protocol

Patient approached to our hospital on November 2022 with the above said complaints. After thorough examination, investigations and assessing *DoshaDushya* involvement, *Nidana* (etiology) and *Lakshanas* (symptoms) following Ayurvedic treatment was planned.

Internal Oral medicines: Considering *Prakriti*, *Dosha* involvement and *Agni*, *Bala* of patient, customized formulations were advised like Dr. Shuddhi Powder, Carcinex Capsule, GranthiharVati, Oncoblaze powder, Ashwagandha Powder. Internal oral medicines were continued for a period 1 year. Patient was examined monthly basis and necessary changes were made in medicines considering *DoshaDushya* involvement.

After 1 month of *Shaman Aushadhi*, Panchakarma Therapy was advised. Amongst the Therapies, *Shirodhara, Lepa* like *DashangLepa, Parishek* and *MatraBasti* were done for 10 days.

Tailored Dietary recommendation based on Ayurvedic principles were guided and important dietary changes. Alkaline water was suggested to maintain body's alkaline acid environment, which is known to prevent and fight Cancer. Diet was focused on intake of fresh fruits, vegetables and millets. Patient was advised to avoid wheat, rice, non-vegetarian, heavy to digest foodstuff. Herbal tea was given as substitute to regular intake of tea, coffee or other cold beverages.

Mind Body Practices: Regular Yoga and meditation sessions aimed at managing Stress, improving emotional well - being and fostering overall balance. Patient was advised to do bare foot walking and sun gazing.

An accurately designed DIP Diet was provided to the patient to complement the Ayurvedic treatments administered for Cancer[9,10,11]:

I. Diet Plan:

Dietary Recommendations from Shuddhi Ayurveda Panchakarma Hospital:

- Avoid wheat, refined foods, dairy, coffee, tea, and packaged foods.
- Do not eat after 8 PM.
- When eating solid foods, take small bites and chew each bite 32 times.

Hydration:

- Drink alkaline water 3-4 times daily, along with herbal teas, "living" water, turmeric water and coconut water.

Meal Timing and Meal Structure:

- Early Morning (5:45 AM): Herbal tea and Curry leaves in a manner that 1 leaf in 1 minute/ 5 leaves in 5 minutes with raw turmeric and ginger.
- Breakfast (9:00 AM): Fruitsand sprouts with almond milk.
- Lunch (12:30 PM - 2:00 PM):Plate 1: Salad; Plate 2: Millet Shake or millet recipes.
- Evening Snacks (4:00 PM): Green juice (100-150 ml) prepared of 10 curry leaves, 2 Ajwain leaves, 5 Giloy leaves, 2-inch Aloe Vera, 2 Neem leaves, 5 Tulsi, Dhania, Pudina and ½ Paan and 4-5 almonds.
- Dinner (6:00 PM): Plate 1: 4 types of raw vegetableswith raw turmeric and ginger.

Fasting:

- It is recommended to fast once a week.

Special Instructions:

- Sit in sunlight for 1-hour morning and evening.
- Offer thanks to the divine before eating or drinking.

II. Lifestyle Recommendations

1. Include meditation as a method for relieving stress.
2. Practice Yoga (*Sukshma Pranayama and sukhasana*) 40 minutes daily.
3. Aim for 6-8 hours of restful sleep each night.
4. Walk briskly for 30 minutes daily, preferably barefoot on natural surfaces like grass, to improve circulation and foster a deeper connection with nature.
5. Follow a balanced and structured daily routine that supports equilibrium between meals, physical activity, and rest, helping to promote long-term health and vitality.

III. Panchakarma procedures administered to patients

1. *Parisheka* with *Dhanyamla*

Procedure

- **The Dhanyamla diluted with warm water.**
- **The practitioner sprinkled the mixture over the body, starting from the head and moving downwards.**
- **The treatment lasted 10-30 minutes, with a gentle massage in specific areas.**

Physiology and Mode of action

- *Dhanyamla*isAyurvedic medicine that promotes detoxification, supports digestion and balances skin pH.
- They stimulate the lymphatic system, enhances nutrient flow and possess analgesic and anti-inflammatory properties.
- *Dhanyamla* balances *Vata*and *Kaphadoshas*, fostering calmness, mental relaxation and clarity [12].

2. *Shiroabhyanga* with *Brahmi* oil

Procedure

- **Brahmi oil was gently warmed to a comfortable temperature.**
- **The warm Brahmi oil was applied to the scalp, head, neck and shoulders using gentle, rhythmic strokes.**
- **The massage focused on stimulating circulation, relaxing muscles and nourishing the skin, with special attention given to the joints and areas of tension.**
- **The massage lasted for 20-30 minutes.**
- **After the massage, the patient rested briefly to allow the oil to penetrate the skin and tissues.**

Physiology and Mode of Action

- *Shiroabhyanga* with Brahmi oil is a therapeutic head massage that stimulates circulation, relaxes muscles and nourishes the scalp.
- It enhances blood flow, reduces tension, mental fatigue, and stress, and improves cognitive function.
- Brahmi oil balances *Pitta* and *Vatadoshas*, promoting emotional stability, physical health, and mental clarity [13,14].

3.*Lepam* over breast with *Dashanga*

Procedure

- *Dashanga* was ground into a smooth paste using water to achieve the desired consistency.
- The patient was positioned comfortably in a relaxed, supine posture and the medicinal paste was evenly applied to the breast, gently massaged with circular motions.
- The paste remained on the breast for 15-30 minutes, ensuring it stayed moist for continuous therapeutic effects.
- After the prescribed time, the paste was gently removed with warm water and a soft cloth, followed by a brief rest and optional light oil application to nourish the skin.

Physiology and Mode of action

- Dashanga, Ayurvedicformulation with strong anti-inflammatory and analgesic properties, reduce inflammation, alleviate pain and improve circulation.
- These Ayurvedicmedicine balances*Vata*and *Pitta*, restoring harmony.
- The massage promotes blood flow, supports tissue healing and aids toxin removal [15].

4. *MatraBasti* with *Sahacharadi oil* (40 ml)

Procedure

- **The 40 ml of Sahacharadi oil was warmed to body temperature.**
- **The person laid on left side, in a comfortable position and the lubricated enema nozzle was gently inserted into the rectum.**
- **The oil was slowly released into the rectum using an enema bag or bulb, and held for 15-20 minutes for absorption.**

Physiology and Mode of action

- **Sahacharadi oil, absorbed through the rectal mucosa, lubricates and hydrates the intestines, promoting smoother bowel movements and reducing constipation.**
- **It calms the nervous system, balances Vatadosha and supports colon cleansing.**
- **The oil nourishes gastrointestinal tissues, reduces inflammation and alleviates conditions like hemorrhoids and anal fissures.** [16,17]

Medicinal Interventions

The Ayurvedictreatment employed in this case included Dr. Shuddhi Powder, GranthiHarVati, Carcinex Capsule, Hrid Care Capsule, JS-LIV III, Immuno care Syrup, Onco Blaze Churna, Divya Shakti Powder, Relivon Powder, Dr. Immune tablet, 32 Herbal Tea and Aswagandha powderalong with Panchakarma therapies.

The medications administered during the IPD are described in **Table 5.**The medications advised during the time of discharge are mentioned in **Table 6.**The patient came for first follow up on January 01, 2023, the medications advised on that day are described on **Table 7.**She returned for follow up on March 18, 2023 and the medications prescribed during the

visit are detailed in **Table 8.** The medications advised during the next visit was on May 04, 2023 are depicted in **Table 9.**The patient returned on August 26, 2023, the Ayurvedic medications prescribed during the visit are mentioned in **Table 10.**The medications prescribed on the visit on November 26, 2023 are mentioned in **Table 11.**

Table 5 The medications administered during the IPD

Medicine	Ingredients	Dosage	Therapeutic Effects
Dr. Shuddhi Powder	**Trikatu**, **Triphala**, **Nagarmotha** (*Cyperus rotundus*), **Vay Vidang** (*Embelia ribes*), **Chhoti Elaichi** (*Elettaria cardamomum*), **Tej Patta** (*Cinnamomum tamala*), **Laung** (*Syzygium aromaticum*), **Nishoth** (*Operculina turpethum*), **Sendha Namak**, **Dhaniya** (*Coriandrum sativum*), **Pipla Mool** (*Piper longum root*), **Jeera** (*Cuminum cyminum*), **Nagkesar** (*Mesua ferrea*), **Amarvati** (*Achyranthes aspera*), **Anardana** (*Punica granatum*), **Badi Elaichi** (*Amomum subulatum*), **Hing** (*Ferula assafoetida*), **Kachnar** (*Bauhinia variegata*), **Ajmod** (*Trachyspermum ammi*), **Sazzikhar**, **Pushkarmool** (*Inula racemosa*), **Mishri** (*Saccharum officinarum*)	Half a teaspoon HS (*Nishikal with koshna jala*)	Used for detoxification
Granthi Har Vati	**Kachnar** (*Bauhinia variegata*), **Gugglu** (*Commiphora wightii*), **Amalki** (*Phyllanthus emblica*), **Bibhitika** (*Terminalia bellirica*), **Haritiki** (*Terminalia chebula*), **Shunti** (*Zingiber officinale*), **Marich** (*Piper nigrum*), **Pippal** (*Piper longum*), **Varuna** (*Crateva religiosa*), **Sukshamala**, **Dalchini** (*Cinnamomum verum*), and **Tamal Patar** (*Cinnamomum tamala*)	2 TAB BD (*Adhobhakta* with *koshna jala*)	Used for thyroid disfunction, enlarged lymphnodes, breast lump, PCOD, weight loss, fibroids, endometriosis and obesity
Carcinex Capsule	**Guduchi powder** (*Tinospora cordifolia*), **Kirattikta powder** (*Andrographis paniculata*), **Maricha powder** (*Piper nigrum*), **Paneer Dodi powder** (*Hedychium spicatum*), **Amlaki rasayan powder** (*Phyllanthus emblica*), **Tamra bhasma powder**, **Swarnamakshik Bhasma**, **Kalmegha** (*Andrographis paniculata*), **Neem powder** (*Azadirachta indica*), **Lavang powder** (*Syzygium aromaticum*), **Abhrak Bhasma powder**	1 CAP BD (*Adhobhakta* with *koshna jala*)	Used for Arbud/Granthi, LRTI, cell rejuvenation and boosts immune system
Hrid Care Capsule	**Lahshun BI. Ext.** (*Allium sativum*), **Arjun Bk. Ext.** (*Terminalia arjuna*), **Brahmi Lf. Ext.** (*Bacopa monnieri*), **Giloy St. Ext.** (*Tinospora cordifolia*), **Makoy Fr. Ext.** (*Solanum nigrum*), **Sarpgandha Sd. Ext.** (*Rauvolfia serpentina*), **Shankh Bhasma**	1 CAP BD *(Adhobhakta with koshna jala)*	Used for the treatment of various conditions, including coronary artery disease (CAD), hypertension (HTN), acidity, insomnia, high blood pressure, and aortic disease.
JS-LIV III	**Aamlaki** (*Emblica officinalis*), **Haritaki** (*Terminalia chebula*), **Bhumi** (*Phyllanthus niruri*), **Himsra** (*Capparis decidua*), **Kutki** (*Picrorhiza kurroa*), **Mamejak** (*Enicostemma littorale*), **Guduchi** (*Tinospora cordifolia*), **Kasari** (*Cymbopogon spp.*) [Needs clarification], **Kalmegha** (*Andrographis paniculata*), **Arjuna** (*Terminalia arjuna*), **Bhringraj** (*Eclipta prostrata*), **Chitrak** (*Plumbago zeylanica*), **Kakmachi** (*Solanum nigrum*), **Kasmarda** (*Cassia occidentalis*), **Punarnava** (*Boerhavia diffusa*), **Tulsi** (*Ocimum sanctum*), **Vidang** (*Embelia ribes*)	1 CAP BD (*Adhobhakta* with *koshna Jala*)	Helps to alleviate hepatic dysfunction, GIT, Hepatomegaly, liver disorders, high cholesterol, pancreatitis and GB stone
Immuno care Syrup	**Giloy** (*Tinospora cordifolia*), **Aloe vera** (*Aloe barbadensis*), **Tulsi** (*Ocimum sanctum*), **Daru Haldi** (*Berberis aristata*), **Amba Haldi** (*Curcuma amada*), **Mulethi** (*Glycyrrhiza glabra*), **Kutki** (*Picrorhiza kurroa*), **Peepli** (*Piper longum*), **Ajwain** (*Trachyspermum ammi*), **Kalmegh** (*Andrographis paniculata*), **Honey**	15 ml BD (*Adhobhakta with sama matra koshna jala)*	Boosts Immunity,Supports Respiratory Health,Enhanced Liver Function, Improves Digestion and Anti-inflammatory Benefits

Table 6. The medications advised during the time of discharge

Medicine Name	Ingredients	Dosage	Therapeutic Effects
Onco blaze powder	**Guduchi powder** (*Tinospora cordifolia*), **Kalmegh powder** (*Andrographis paniculata*), **Amalaki powder** (*Phyllanthus emblica*), **Kantakari powder** (*Solanum xanthocarpum*), **Atasi powder** (*Linum usitatissimum*), **Jadaber powder** (*Curculigo orchioides*), **Haridra powder** (*Curcuma longa*), **Sitaphal powder** (*Annona squamosa*), Magnesium Stearate, magnesium silicate	Half a TSF BD (*Adhobhakta* with *koshna Jala*)	Manages all type of Arbud/Granthi and boosts immunity
Carcinex Capsule	**Guduchi powder** (*Tinospora cordifolia*), **Kirattikta powder** (*Andrographis paniculata*), **Maricha powder** (*Piper nigrum*), **Paneer Dodi powder** (*Hedychium spicatum*), **Amlaki rasayan powder** (*Phyllanthus emblica*), **Tamra bhasma powder**, **Swarnamakshik Bhasma**, **Kalmegha** (*Andrographis paniculata*), **Neem powder** (*Azadirachta indica*), **Lavang powder** (*Syzygium aromaticum*), **Abhrak Bhasma powder**	1 CAP BD (*Adhobhakta* with *koshna jala*)	Used for Arbud/Granthi, LRTI, cell rejuvenation and boosts immune system
Dr. Shuddhi Powder	**Trikatu**, **Triphala**, **Nagarmotha** (*Cyperus rotundus*), **Vay Vidang** (*Embelia ribes*), **Chhoti Elaichi** (*Elettaria cardamomum*), **Tej Patta** (*Cinnamomum tamala*), **Laung** (*Syzygium aromaticum*), **Nishoth** (*Operculina turpethum*), **Sendha Namak**, **Dhaniya** (*Coriandrum sativum*), **Pipla Mool** (*Piper longum root*), **Jeera** (*Cuminum cyminum*), **Nagkesar** (*Mesua ferrea*), **Amarvati** (*Achyranthes aspera*), **Anardana** (*Punica granatum*), **Badi Elaichi** (*Amomum subulatum*), **Hing** (*Ferula assafoetida*), **Kachnar** (*Bauhinia variegata*), **Ajmod** (*Trachyspermum ammi*), **Sazzikhar**, **Pushkarmool** (*Inula racemosa*), **Mishri** (*Saccharum officinarum*)	Half a teaspoon HS *(Nishikal* with *koshna jala*)	Used for detoxification
Granthi Har Vati	**Kachnar** (*Bauhinia variegata*), **Gugglu** (*Commiphora wightii*), **Amalki** (*Phyllanthus emblica*), **Bibhitika** (*Terminalia bellirica*), **Haritiki** (*Terminalia chebula*), **Shunti** (*Zingiber officinale*), **Marich** (*Piper nigrum*), **Pippal** (*Piper longum*), **Varuna** (*Crateva religiosa*), **Sukshamala**, **Dalchini** (*Cinnamomum verum*), and **Tamal Patar** (*Cinnamomum tamala*)	1 TAB BD (*Adhobhakta* with *koshna jala*)	Supports thyroid disfunction, enlarged lymphnodes, breast lump, PCOD, weight loss, fibroids, endometriosis and obesity

Table 7 The medications advised on January 21, 2023

Medicine Name	Ingredients	Dosage	Therapeutic Effects
Onco blaze powder	**Guduchi powder** (*Tinospora cordifolia*), **Kalmegh powder** (*Andrographis paniculata*), **Amalaki powder** (*Phyllanthus emblica*), **Kantakari powder** (*Solanum xanthocarpum*), **Atasi powder** (*Linum usitatissimum*), **Jadaber powder** (*Curculigo orchioides*), **Haridra powder** (*Curcuma longa*), **Sitaphal powder** (*Annona squamosa*), Magnesium Stearate, magnesium silicate	Half a TSF BD (*Adhobhakta* with *koshna Jala*)	Manages all type of Arbud/Granthi and boosts immunity
Relivon Powder	**Saverna Patri** (*Luffa aegyptiaca*), **Misreya**, **Senda Namal**, **Sonth** (*Zingiber officinale*), **Jang Harar** (*Chebulic Myrobalan*), and **Erand Oil** (*Ricinus communis*).	Half a TSF HS (*Nishikal* with *koshna Jala*)	helps to manage constipation, indigestion, auto immune disease, undigested metabolic waste and rheumatoid arthritis
Carcinex Capsule	**Guduchi powder** (*Tinospora cordifolia*), **Kirattikta powder** (*Andrographis paniculata*), **Maricha powder** (*Piper nigrum*), **Paneer Dodi powder** (*Hedychium spicatum*), **Amlaki rasayan powder** (*Phyllanthus emblica*), **Tamra bhasma powder**, **Swarnamakshik Bhasma**, **Kalmegha** (*Andrographis paniculata*), **Neem powder** (*Azadirachta indica*), **Lavang powder** (*Syzygium aromaticum*), **Abhrak Bhasma powder**	2 CAP BD (*Adhobhakta* with *koshna jala*)	Used for Arbud/Granthi, LRTI, cell rejuvenation and boosts immune system
Granthi Har Vati	**Kachnar** (*Bauhinia variegata*), **Gugglu** (*Commiphora wightii*), **Amalki** (*Phyllanthus emblica*), **Bibhitika** (*Terminalia bellirica*), **Haritiki** (*Terminalia chebula*), **Shunti** (*Zingiber officinale*), **Marich** (*Piper nigrum*), **Pippal** (*Piper longum*), **Varuna** (*Crateva religiosa*), **Sukshamala**, **Dalchini** (*Cinnamomum verum*), and **Tamal Patar** (*Cinnamomum tamala*)	2 TAB BD *(Adhobhakta* with *koshna jala)*	Supports thyroid disfunction, enlarged lymphnodes, breast lump, PCOD, weight loss, fibroids, endometriosis and obesity
Hrid Care Capsule	**Lahshun BI. Ext.** (*Allium sativum*), **Arjun Bk. Ext.** (*Terminalia arjuna*), **Brahmi Lf. Ext.** (*Bacopa monnieri*), **Giloy St. Ext.** (*Tinospora cordifolia*), **Makoy Fr. Ext.** (*Solanum nigrum*), **Sarpgandha Sd. Ext.** (*Rauvolfia serpentina*), **Shankh Bhasma**	1 CAP BD (*Adhobhakta with koshna jala*)	Used for the treatment of various conditions, including coronary artery disease (CAD), hypertension (HTN), acidity, insomnia, high blood pressure, and aortic disease.

Table 8. The medications prescribed during the follow up on March 18, 2023

Medicine Name	Ingredients	Dosage	Therapeutic Effects
Onco blaze powder	**Guduchi powder** (*Tinospora cordifolia*), **Kalmegh powder** (*Andrographis paniculata*), **Amalaki powder** (*Phyllanthus emblica*), **Kantakari powder** (*Solanum xanthocarpum*), **Atasi powder** (*Linum usitatissimum*), **Jadaber powder** (*Curculigo orchioides*), **Haridra powder** (*Curcuma longa*), **Sitaphal powder** (*Annona squamosa*), Magnesium Stearate, magnesium silicate	Half a TSF BD (*Adhobhakta* with *koshna Jala*)	Manages all type of Arbud/Granthi and boosts immunity
Carcinex Capsule	**Guduchi powder** (*Tinospora cordifolia*), **Kirattikta powder** (*Andrographis paniculata*), **Maricha powder** (*Piper nigrum*), **Paneer Dodi powder** (*Hedychium spicatum*), **Amlaki rasayan powder** (*Phyllanthus emblica*), **Tamra bhasma powder**, **Swarnamakshik Bhasma**, **Kalmegha** (*Andrographis paniculata*), **Neem powder** (*Azadirachta indica*), **Lavang powder** (*Syzygium aromaticum*), **Abhrak Bhasma powder**	1 CAP BD (*Adhobhakta* with *koshna jala*)	Used for Arbud/Granthi, LRTI, cell rejuvenation and boosts immune system
Hrid Care Capsule	**Lahshun BI. Ext.** (*Allium sativum*), **Arjun Bk. Ext.** (*Terminalia arjuna*), **Brahmi Lf. Ext.** (*Bacopa monnieri*), **Giloy St. Ext.** (*Tinospora cordifolia*), **Makoy Fr. Ext.** (*Solanum nigrum*), **Sarpgandha Sd. Ext.** (*Rauvolfia serpentina*), **Shankh Bhasma**	2 CAP BD (*Adhobhakta with koshna jala*)	Used for the treatment of various conditions, including coronary artery disease (CAD), hypertension (HTN), acidity, insomnia, high blood pressure, and aortic disease.
Dr. Immune tablet	**Kesar** (*Crocus sativus*), **Shudh Kuchla** (*Strychnos nux-vomica*), **Ashwagandha Ext.** (*Withania somnifera*), **Shatawari Ext.** (*Asparagus racemosus*), **Pipali** (*Piper longum*), **Tulsi** (*Ocimum sanctum*), **Laung** (*Syzygium aromaticum*), **Choti Elaichi** (*Elettaria cardamomum*), **Sonth** (*Zingiber officinale*), **Haldi** (*Curcuma longa*), **Loh Bhasma** (*Ferrum*), **Swaran Makshik Bhasma** (*Chalcopyrite*), **Mukta Shukti Bhasma** (*Pinctada margaritifera*)	1 tablet BD *(Adhobhakta* with *koshna jala)*	Helps to flush out toxins from the body, Improves digestion, Helps in balancing the hormones, Boost immunity and Improves the blood flow

Effectiveness of Ayurvedic Treatments: The assessment was done after every 15 days and it was found to be very much satisfactory in terms of symptomatic relief and quality of life. Burning sensation at left breast region was reduced by 70%. Other complaints like heartburn, gases, constipation was reduced. Her bowel movement was clear, appetite was improved, energy levels increased and overall general condition was improved.

The patient was on regular follow up till November 2023 (i.e. for about 1 year) without any major complaints related to disease, and was able to do all routine household activities.

Table 9. The medications advised during the visit on May 04, 2023

Medicine Name	Ingredients	Dosage	Therapeutic
Carcinex Capsule	**Guduchi powder** (*Tinospora cordifolia*), **Kirattikta powder** (*Andrographis paniculata*), **Maricha powder** (*Piper nigrum*), **Paneer Dodi powder** (*Hedychium spicatum*), **Amlaki rasayan powder** (*Phyllanthus emblica*), **Tamra bhasma powder**, **Swarnamakshik Bhasma**, **Kalmegha** (*Andrographis paniculata*), **Neem powder** (*Azadirachta indica*), **Lavang powder** (*Syzygium aromaticum*), **Abhrak Bhasma powder**	1 CAP BD (*Adhobhakta* with *koshna jala*)	Used for Arbud/Granthi, LRTI, cell rejuvenation and boosts immune system
Onco blaze powder	**Guduchi powder** (*Tinospora cordifolia*), **Kalmegh powder** (*Andrographis paniculata*), **Amalaki powder** (*Phyllanthus emblica*), **Kantakari powder** (*Solanum xanthocarpum*), **Atasi powder** (*Linum usitatissimum*), **Jadaber powder** (*Curculigo orchioides*), **Haridra powder** (*Curcuma longa*), **Sitaphal powder** (*Annona squamosa*), Magnesium Stearate, magnesium silicate	Half a TSF BD (*Adhobhakta* with *koshna jala*)	Manages all type of Arbud/Granthi and boosts immunity
32 Herbal Tea	**Gauzaban** (*Echium amoenum*), **Kulanjan** (*Alpinia galanga*), **Choti Elaichi** (*Elettaria cardamomum*), **Laung** (*Syzygium aromaticum*), **Badi Elaichi** (*Amomum subulatum*), **Badiyan Khtay** (*Illicium verum*), **Banafsha** (*Viola odorata*), **Jufa** (*Clerodendrum serratum*), **Ashwagandha** (*Withania somnifera*), **Mulethi** (*Glycyrrhiza glabra*), **Punarnava** (*Boerhavia diffusa*), **Brahmi** (*Bacopa monnieri*), **Chitrak** (*Plumbago zeylanica*), **Kali Mirch** (*Piper nigrum*), **Adoosa** (*Adhatoda vasica*), **Saunf** (*Foeniculum vulgare*), **Shankh Pushp** (*Evolvulus alsinoides*), **Tulsi** (*Ocimum sanctum*), **Arjuna** (*Terminalia arjuna*), **Motha** (*Cyperus rotundus*), **Senaye** (*Cuscuta reflexa*), **Sonth** (*Zingiber officinale*), **Majeeth** (*Rubia cordifolia*), **Sarfoka** (*Sphaeranthus indicus*), **Dalchini** (*Cinnamomum verum*), **Gulab** (*Rosa spp.*), **Green Tea** (*Camellia sinensis*), **Giloy** (*Tinospora cordifolia*), **Tej Patta** (*Cinnamomum tamala*), **Lal Chandan** (*Pterocarpus santalinus*), **White Chandan** (*Santalum album*), **Pudina** (*Mentha spicata*)	Empty stomach in early morning SOS	Helps to enhance immunity, hyper acidity, kidney, liver and Arbud/Granthi

To evaluate treatment response, PET CT was repeated in November 2023, in comparison to previous PET CT which was done before starting the Ayurvedic treatment, this report revealed No significant FDG uptake. Ill-defined soft density lesion in upper and central outer quadrant of left breast parenchyma, measuring 1.8 x 0.8cm shows significant reduction in size. Non -FDG avid bilateral axillary lymph node noted, largest is 1.2 x 0.7 cm. No significant bilateral axillary, internal mammary and supraclavicular lymph nodes are noted.

Table 10. The Ayurvedic medications prescribed during the visit on August 26, 2023

Medicine Name	Ingredients	Dosage	Therapeutic Effects
Carcinex Capsule	**Guduchi powder** (*Tinospora cordifolia*), **Kirattikta powder** (*Andrographis paniculata*), **Maricha powder** (*Piper nigrum*), **Paneer Dodi powder** (*Hedychium spicatum*), **Amlaki rasayan powder** (*Phyllanthus emblica*), **Tamra bhasma powder**, **Swarnamakshik Bhasma**, **Kalmegha** (*Andrographis paniculata*), **Neem powder** (*Azadirachta indica*), **Lavang powder** (*Syzygium aromaticum*), **Abhrak Bhasma powder**	1 CAP BD (*Adhobhakta* with *koshna jala*)	Used for Arbud/Granthi, LRTI, cell rejuvenation and boosts immune system
Onco blaze powder	**Guduchi powder** (*Tinospora cordifolia*), **Kalmegh powder** (*Andrographis paniculata*), **Amalaki powder** (*Phyllanthus emblica*), **Kantakari powder** (*Solanum xanthocarpum*), **Atasi powder** (*Linum usitatissimum*), **Jadaber powder** (*Curculigo orchioides*), **Haridra powder** (*Curcuma longa*), **Sitaphal powder** (*Annona squamosa*), Magnesium Stearate, magnesium silicate	Half a TSF BD (*Adhobhakta* with *koshna jala*)	Manages all type of Arbud/Granthi and boosts immunity
Hrid Care Capsule	**Lahshun BI. Ext.** (*Allium sativum*), **Arjun Bk. Ext.** (*Terminalia arjuna*), **Brahmi Lf. Ext.** (*Bacopa monnieri*), **Giloy St. Ext.** (*Tinospora cordifolia*), **Makoy Fr. Ext.** (*Solanum nigrum*), **Sarpgandha Sd. Ext.** (*Rauvolfia serpentina*), **Shankh Bhasma**	2 CAP BD (*Adhobhakta with koshna jala*)	Used for the treatment of various conditions, including coronary artery disease (CAD), hypertension (HTN), acidity, insomnia, high blood pressure, and aortic disease.
Aswagandha powder	**Ashwagandha** *(Withania somnifera)*	Half a TSF BD (*Adhobhakta* with *koshna jala*)	Supports immune system, reduce stress and have anti inflammatory properties

Table 11 The medications prescribed on the visit on November 26, 2023

Medicine Name	Ingredients	Dosage	Therapeutic Effects
Carcinex Capsule	**Guduchi powder** (*Tinospora cordifolia*), **Kirattikta powder** (*Andrographis paniculata*), **Maricha powder** (*Piper nigrum*), **Paneer Dodi powder** (*Hedychium spicatum*), **Amlaki rasayan powder** (*Phyllanthus emblica*), **Tamra bhasma powder**, **Swarnamakshik Bhasma**, **Kalmegha** (*Andrographis paniculata*), **Neem powder** (*Azadirachta indica*), **Lavang powder** (*Syzygium aromaticum*), **Abhrak Bhasma powder**	2 CAP BD (*Adhobhakta* with *koshna jala*)	Used for Arbud/Granthi, LRTI, cell rejuvenation and boosts immune system
Onco blaze powder	**Guduchi powder** (*Tinospora cordifolia*), **Kalmegh powder** (*Andrographis paniculata*), **Amalaki powder** (*Phyllanthus emblica*), **Kantakari powder** (*Solanum xanthocarpum*), **Atasi powder** (*Linum usitatissimum*), **Jadaber powder** (*Curculigo orchioides*), **Haridra powder** (*Curcuma longa*), **Sitaphal powder** (*Annona squamosa*), Magnesium Stearate, magnesium silicate	Half a TSF BD (*Adhobhakta* with *koshna jala*)	Manages all type of Arbud/Granthi and boosts immunity

RESULT

The histopathology reports of May 17, 2024 denoted that there was no extensive in situ component, lymphovascular emboli, perineural invasion and all margins were free from tumor. Whole body PET CT scan reports on November 24, 2023 are in **Fig 1.** ^{18}F-Flurodeoxyglucose PET CT scan on April 14, 2023 are depicted in **Fig 2** and December 23, 2023 are depicted as **Fig 3.** The FNAC report is imaged in **Fig 4.** The histopathology report on May 17, 2024 **Fig 5.** The PET CT scan results during the treatment period is mentioned in **Table 12.** The pain score during the IPD treatment is mentioned in **Table 13.**

Table 12 The PET CT scan results during the treatment period

Date	Description
24-Nov-22	A prominent left axillary node measuring about **1.8 × 1.2 cm** with no significant FDG uptake (SUV max-1.2), and showing maintaines fatty hilum)
14-Apr-23	An ill-defined soft tissue lesion is seen in left breast parenchyma with no significant increased FDG uptake **17 × 15 mm**
23-Dec-23	No significant FDG uptake is noted in the ill-defined soft tissue density lesion in the upper and centrl outer quadrant of left breast parenchyma measuring approximately **1.8 × 0.8 cm** shows significant reduction in size.

Table 13. The pain score during the IPD treatment

Date	02-12-2022	13-12-2022
Pain Score (0-10)	0-3	0

Implications for Future Research

This study examined the effects of Ayurvedic treatments on a patient with low-grade breast carcinoma, showing promising results, including significant symptomatic relief and improved overall well-being. While these findings are encouraging, the study's small sample size limits its ability to be generalized. To confirm the safety, efficacy and consistency of Ayurvedic treatments for breast cancer, further research involving larger patient cohorts is essential. Randomized controlled trials (RCTs) are needed, as they are the gold standard for clinical research, minimizing bias and ensuring reliable results. Larger studies would also help to assess the long-term effects of Ayurveda and explore its potential synergy with conventional treatments like chemotherapy. Such research could lead to the development of standardized therapeutic guidelines, providing healthcare providers with evidence-based practices for integrating

Ayurveda into cancer care. Ultimately, these findings could enhance patient outcomes by offering complementary treatment options alongside conventional therapies.

DISCUSSION

The positive outcome observed in present case study encourages the promising future of Ayurvedic treatment in breast cancer symptom management. Addressing not only the physical dimensions but also the emotional and lifestyle factors deliver enhanced treatment outcome. According to Ayurveda, Breast Cancer can be cured by balancing *Doshas* of the body. The line of treatment is done according to balance of *Rog* and *Rogi*. Ayurveda literature describes it as increased Mansa and *MedaDhatus* in *Stana* (breast) causing Dushtastanarbud[5]. These changes are attributed to imbalance of *Tridosha*.

Ayurvedic treatment for breast cancer includes *Shodhana* (detox therapies like Panchakarma), *Shamana* (Ayurvedic medicines like Ashwagandha, and Turmeric), *Rasayana* (immune-boosting tonics), dietary modifications, lifestyle changes (Yoga, meditation), and external therapies. It integrates well with modern treatments to enhance immunity, reduce side effects, and improve overall well-being.

Based on the symptoms, evaluation of *Dosha*, *Agni*, *Bala* and *Prakruti*, the chosen Ayurvedic formulations targeted the *Agni* (digestion and metabolism), *VataShaman* (Which helps in controlling abnormal growth of cells) and enhancing *Ojas*. According to Ayurveda, *Stana*(breast) are considered *Updhatu* of *Rasadhatu*. Hence, treatment was also focused on reducing *Rasadushti* and improving quality of *Rasadhatu*. In present case study, Stress was a crucial observation. Ayurveda mentions *Chinta* as one of the causative factors of Rasa Dushti[18,19]. Therefore, therapy like *Shirodhara* helped the patient in stress management. The samprapti[20,21] for this case is depicted in **Fig 6.***Sampraptighataka* of the case is depicted in **Fig 7.**

In Ayurveda, breast cancer develops due to *Dosha-Dushya Sammurchana*, primarily involving *Kapha* dominance with *Vata-Pitta* imbalance. The affected *Dushyas* include *Rakta*, *Mamsa*, and *Meda*, with impaired *Raktavaha*, *Mamsavaha*, and *Medovaha Srotas*, leading to *Stroto Dushti* (*Sanga* and *Granthi* formation). Weakened Agni (*Mandagni*) and deep-seated pathology (*Madhyama Rogamarga*) further aggravate the condition. Ayurvedic interventions target these *Samprapti Ghatakas* through detoxification, metabolic enhancement, and immune support. Panchakarma therapies like *Parisheka*, *Matra Basti*, and *Lepam* eliminate toxins, balance *Kapha-Vata*, and prevent tumor progression. GranthiHarVati and Onco Blaze

Churna act as *Lekhana* and *Kaphahara*, reducing tumor bulk, while Dr. Shuddhi Powder enhances digestion and clears blockages. Circulatory support is provided by Hrid Care Capsule and JS-LIV III, improving *RaktavahaSrotas* and nourishing tissues, while Immuno Care Syrup and Dr. Immune Tablet strengthen *Ojas*, aiding immunity. *Lepam* with *Dashanga* enhances local circulation and reduces inflammation. Aswagandha Powder and 32 Herbal Tea restore Agni, prevent toxin accumulation, and rejuvenate tissues. *Shiroabhyanga* with Brahmi Oil soothes *Vata-Pitta*, alleviating stress, while *Parisheka* with *Dhanyamla* detoxifies and regulates *Kapha*, preventing excessive tissue proliferation. This holistic approach disrupts Granthi/Arbud progression, restores physiological balance, and supports healing.

Fig 6. The *samprapti* for this case study

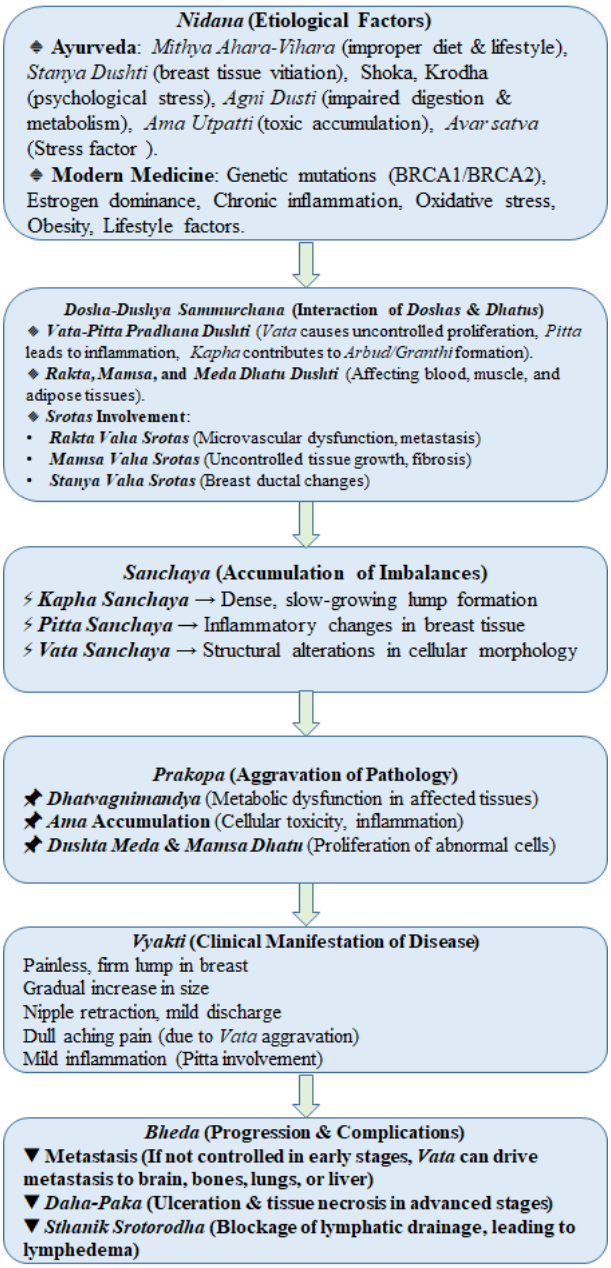


Fig 7. *Sampraptighataka* of the casestudy

Improper diet and lifestyle are primary reason which causes imbalance in Dosha. When Agni is affected, there is accumulation of toxins, which blocks the channels of body. A diet rich in fats and low in fruits and vegetables, sedentary lifestyle, lack of exercise, increasing age play significant role in disease development. Hence, necessary dietary changes are made and thus symptoms like constipation, heartburn, gases were seen to be reduced in patient.

According to Ayurveda, *Panchkarma* therapies treat the affected tissues indirectly by eliminating vitiated *Dosha*, rejuvenating *Dhatus* and restoring immunity in Granthi/Arbud patients. This Ayurvedic perspective provides importance of integrating diverse therapeutic modalities for patient centric approach to breast cancer care.

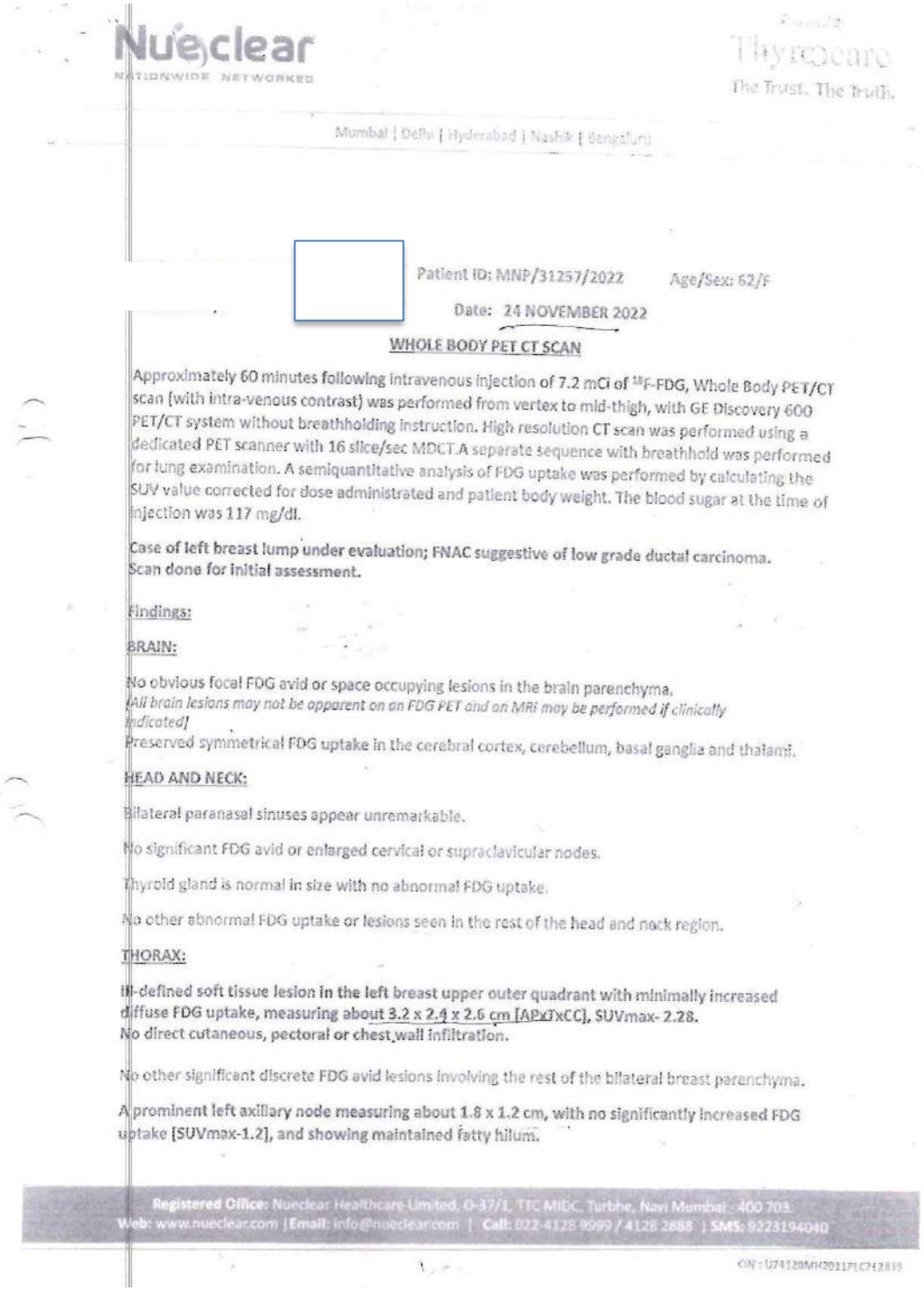
CONCLUSION

This case study highlights the potential of Ayurvedic Treatment in managing symptoms of Breast Cancer, offering a holistic alternative for patients unwilling or unable to undergo conventional therapies like surgical resection or Chemotherapy. Adopting Ayurveda principles can improve patients' wellbeing. Further research and collaboration between traditional and modern medical practices are encouraging to explore integrated approaches to Breast cancer care.

Symptoms: Upon admission, the patient displayed burning sensation, tenderness, swelling and pain at left breast and constipation. Following Ayurvedic inpatient treatment and subsequent care, notable improvements were observed. The patient experienced relief from the symptoms, with no new issues arising, reflecting a significant overall enhancement in health.

Vitals and Investigations: A significant improvement was observed in the symptoms, indicating positive changes in both lifestyle and diet. The PET/CT scan revealed that there was significant reduction in the size of the metabolically inactive left breast parenchymal lesion with no notable new lesions.

In summary, holistic Ayurvedic therapies for Breast cancer have shown promising results, including improvements in PET/CT Scan, vital signs and symptoms. The integration of Ayurvedic treatments helps to alleviate symptoms and enhances overall health. However, further research through comprehensive, well-controlled clinical trials is needed to confirm these findings, establish standardized treatment protocols and provide scientific evidence for the use of Ayurvedic practices in managing breast lower grade carcinoma.



Nueclear
NATIONWIDE NETWORKED

Thyrocare
The Trust. The Truth.

Mumbai | Delhi | Hyderabad | Nashik | Bengaluru

Patient ID: MNP/31257/2022 Age/Sex: 62/F

Date: 24 NOVEMBER 2022

WHOLE BODY PET CT SCAN

Approximately 60 minutes following intravenous injection of 7.2 mCi of ^{18}F-FDG, Whole Body PET/CT scan (with intra-venous contrast) was performed from vertex to mid-thigh, with GE Discovery 600 PET/CT system without breathholding instruction. High resolution CT scan was performed using a dedicated PET scanner with 16 slice/sec MDCT.A separate sequence with breathhold was performed for lung examination. A semiquantitative analysis of FDG uptake was performed by calculating the SUV value corrected for dose administrated and patient body weight. The blood sugar at the time of injection was 117 mg/dl.

Case of left breast lump under evaluation; FNAC suggestive of low grade ductal carcinoma. Scan done for initial assessment.

Findings:

BRAIN:

No obvious focal FDG avid or space occupying lesions in the brain parenchyma.
[All brain lesions may not be apparent on an FDG PET and an MRI may be performed if clinically indicated]
Preserved symmetrical FDG uptake in the cerebral cortex, cerebellum, basal ganglia and thalami.

HEAD AND NECK:

Bilateral paranasal sinuses appear unremarkable.

No significant FDG avid or enlarged cervical or supraclavicular nodes.

Thyroid gland is normal in size with no abnormal FDG uptake.

No other abnormal FDG uptake or lesions seen in the rest of the head and neck region.

THORAX:

Ill-defined soft tissue lesion in the left breast upper outer quadrant with minimally increased diffuse FDG uptake, measuring about 3.2 x 2.4 x 2.6 cm [APxTxCC], SUVmax- 2.28.
No direct cutaneous, pectoral or chest wall infiltration.

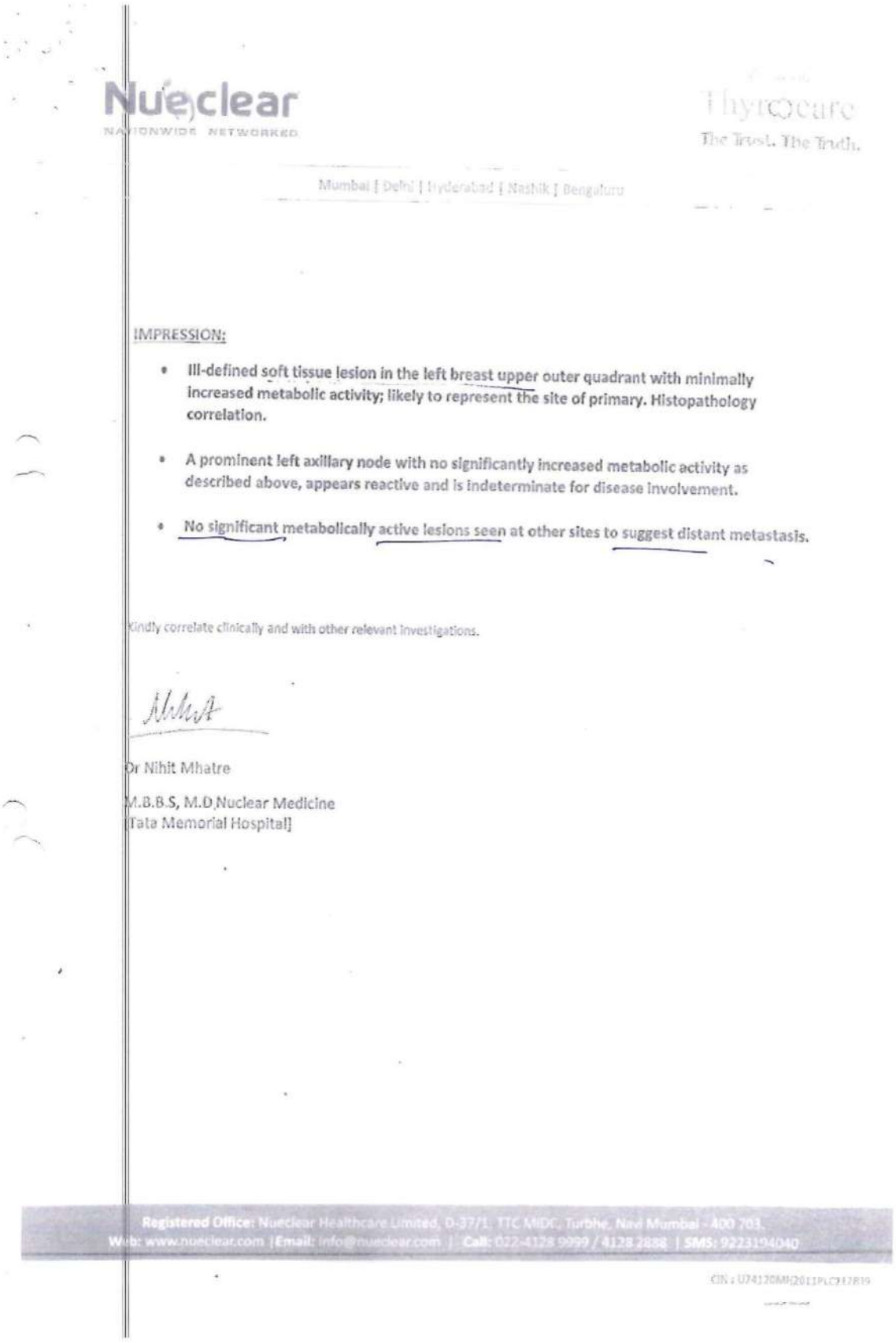
No other significant discrete FDG avid lesions involving the rest of the bilateral breast parenchyma.

A prominent left axillary node measuring about 1.8 x 1.2 cm, with no significantly increased FDG uptake [SUVmax-1.2], and showing maintained fatty hilum.

Registered Office: Nueclear Healthcare Limited, O-37/1, TTC MIDC, Turbhe, Navi Mumbai - 400 703.
Web: www.nueclear.com | Email: info@nueclear.com | Call: 022-4128 9999 / 4128 2888 | SMS: 9223194040

CIN : U74120MH2011PLC218819

Fig 1. Whole body PET CT scan reports on November 24, 2022



Nueclear
NATIONWIDE NETWORKED

Thyrocare
The Trust. The Truth.

Mumbai | Delhi | Hyderabad | Nashik | Bengaluru

IMPRESSION:

- Ill-defined soft tissue lesion in the left breast upper outer quadrant with minimally increased metabolic activity; likely to represent the site of primary. Histopathology correlation.
- A prominent left axillary node with no significantly increased metabolic activity as described above, appears reactive and is indeterminate for disease involvement.
- No significant metabolically active lesions seen at other sites to suggest distant metastasis.

Kindly correlate clinically and with other relevant investigations.

Dr Nihit Mhatre

M.B.B.S, M.D Nuclear Medicine
(Tata Memorial Hospital)

Registered Office: Nueclear Healthcare Limited, D-37/1, TTC MIDC, Turbhe, Navi Mumbai - 400 703
Web: www.nueclear.com | Email: info@nueclear.com | Call: 022-4128 9999 / 4128 2888 | SMS: 9223194040

CIN : U74120MH2013PLC243819

Fig 2.^{18}F-Flurodeoxyglucose PET CT scan on April 14, 2023

Nuclear
NATIONWIDE NETWORKED

Thyro
Tests you

Mumbai | Delhi | Hyderabad | Nashik | Bengaluru

DEPARTMENT OF NUCLEAR MEDICINE & MOLECULAR IMAGING

^{18}F-Flurodeoxyglucose PET-CT scan

Date: 14/04/2023 **Age:** 62 Years Female

Patient Na: [redacted] **Date of Study:** 14/04/2023

Patient ID: MNP/31257 **Referring Physician:** [redacted]

Whole body FDG PET/CECT scan

Brief clinical history:

A case of carcinoma of left breast on ayurvedic treatment. Scan done for disease status evaluation

Procedure: 6.6mCi of 18F-FDG was injected IV after overnight fasting. After a waiting period of 60 minutes, whole body FDG PET CT was performed from vertex to mid-thigh with GE discovery 600 PET/CT systems without breath holding instructions High resolution CT scan was performed using a dedicated PET scanner with 16 slice/sec MDCT. A separate breath hold CT was performed for lung examination. Semi quantitative analysis of FDG uptake was performed by calculating SUV value corrected for dose administered and patient body weight

Fasting blood sugar: 122 mg/dl

Observations:

Head & Neck:

No suspicious lesion is seen in brain parenchyma
Normal physiological tracer distribution is noted in the supra and infra tentorial brain parenchyma.

Registered Office: Nuclear Healthcare Limited, D-37/1, TTC MIDC, Turbhe, Navi Mumbai - 400 703.
Web: www.nuclear.com | Email: info@nuclear.com | Call: 022-4128 9999 / 4128 2888 | SMS: 9223194040

(Note: All brain metastases may not be apparent on a PET-CT scan and an MRI may be performed where clinically indicated).

Normal physiologic FDG uptake is seen in the ocular muscles.
Salivary glands demonstrate normal metabolic activity.
Thyroid gland appears unremarkable with no demonstrable abnormal FDG uptake.

No focal FDG uptake or suspicious lesion is noted in the nasopharynx, oropharynx, hypopharynx and larynx.

No significantly enlarged or hypermetabolic cervical lymphadenopathy is noted.

Thorax:

Mediastinal vascular structures appear unremarkable.
Normal physiological FDG uptake is seen in the myocardium.
Trachea and the main bronchi appear unremarkable.

No discrete suspicious nodules are seen in bilateral lung fields
No evidence of any pleural or pericardial effusions seen.

No significantly enlarged or hypermetabolic mediastinal lymphadenopathy is noted.

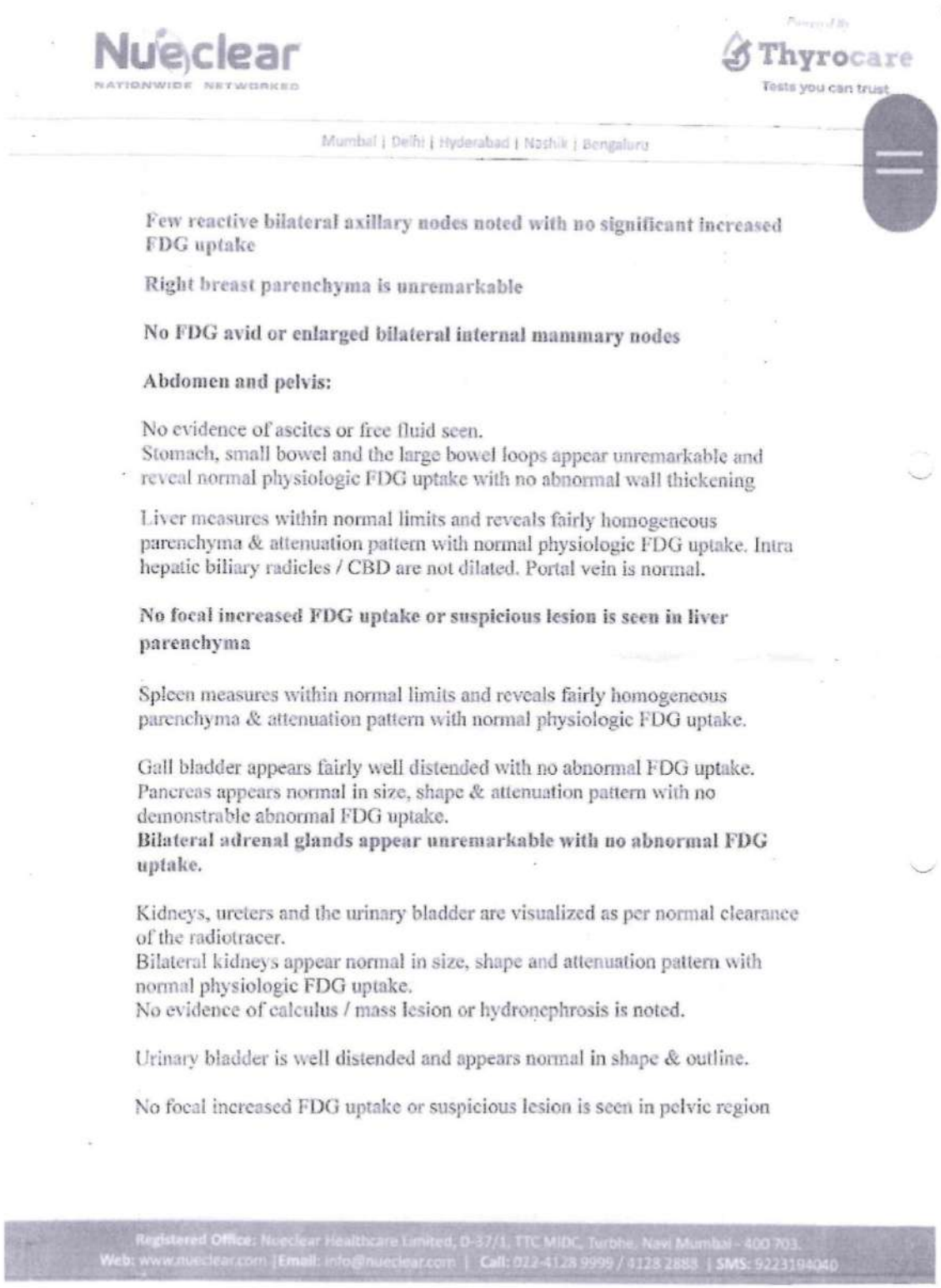
Breasts:

An ill-defined soft tissue lesion is seen in left breast parenchyma (upper outer quadrant) with no significant increased FDG uptake – 17 x 15 mm (previous – 18 x 14 mm)

No discrete suspicious satellite nodules noted
No associated skin thickening is seen

Nipple areola complex is uninvolved

No underlying chest wall involvement is seen



Nueclear
NATIONWIDE NETWORKED

Thyrocare
Tests you can trust

Mumbai | Delhi | Hyderabad | Nashik | Bengaluru

Few reactive bilateral axillary nodes noted with no significant increased FDG uptake

Right breast parenchyma is unremarkable

No FDG avid or enlarged bilateral internal mammary nodes

Abdomen and pelvis:

No evidence of ascites or free fluid seen.
Stomach, small bowel and the large bowel loops appear unremarkable and reveal normal physiologic FDG uptake with no abnormal wall thickening

Liver measures within normal limits and reveals fairly homogeneous parenchyma & attenuation pattern with normal physiologic FDG uptake. Intra hepatic biliary radicles / CBD are not dilated. Portal vein is normal.

No focal increased FDG uptake or suspicious lesion is seen in liver parenchyma

Spleen measures within normal limits and reveals fairly homogeneous parenchyma & attenuation pattern with normal physiologic FDG uptake.

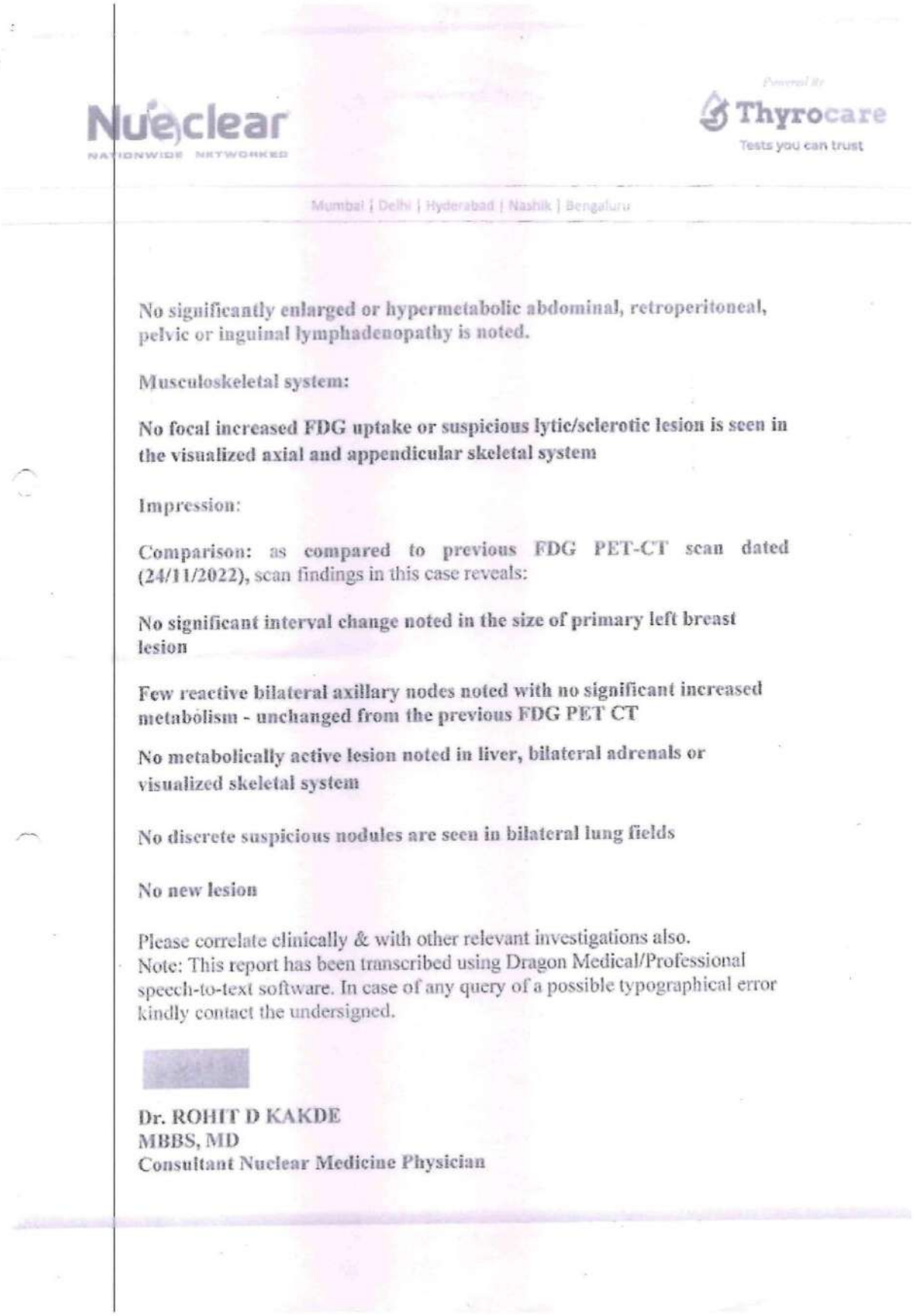
Gall bladder appears fairly well distended with no abnormal FDG uptake.
Pancreas appears normal in size, shape & attenuation pattern with no demonstrable abnormal FDG uptake.
Bilateral adrenal glands appear unremarkable with no abnormal FDG uptake.

Kidneys, ureters and the urinary bladder are visualized as per normal clearance of the radiotracer.
Bilateral kidneys appear normal in size, shape and attenuation pattern with normal physiologic FDG uptake.
No evidence of calculus / mass lesion or hydronephrosis is noted.

Urinary bladder is well distended and appears normal in shape & outline.

No focal increased FDG uptake or suspicious lesion is seen in pelvic region

Registered Office: Nueclear Healthcare Limited, D-37/1, TTC MIDC, Turbhe, Navi Mumbai - 400 703.
Web: www.nueclear.com | Email: info@nueclear.com | Call: 022-4128 9999 / 6128 2888 | SMS: 9223194040



Nuclear
NATIONWIDE NETWORKED

Powered By
Thyrocare
Tests you can trust

Mumbai | Delhi | Hyderabad | Nashik | Bengaluru

No significantly enlarged or hypermetabolic abdominal, retroperitoneal, pelvic or inguinal lymphadenopathy is noted.

Musculoskeletal system:

No focal increased FDG uptake or suspicious lytic/sclerotic lesion is seen in the visualized axial and appendicular skeletal system

Impression:

Comparison: as compared to previous FDG PET-CT scan dated (24/11/2022), scan findings in this case reveals:

No significant interval change noted in the size of primary left breast lesion

Few reactive bilateral axillary nodes noted with no significant increased metabolism - unchanged from the previous FDG PET CT

No metabolically active lesion noted in liver, bilateral adrenals or visualized skeletal system

No discrete suspicious nodules are seen in bilateral lung fields

No new lesion

Please correlate clinically & with other relevant investigations also.
Note: This report has been transcribed using Dragon Medical/Professional speech-to-text software. In case of any query of a possible typographical error kindly contact the undersigned.

Dr. ROHIT D KAKDE
MBBS, MD
Consultant Nuclear Medicine Physician

Fig 3. Whole body PET CT scan reports on December 23, 2023

Nueclear
NATIONWIDE NETWORKED

Powered By
Thyrocare
Tests you can trust

Mumbai | Delhi | Hyderabad | Nashik | Bengaluru

Name :		PET No :	PET
Age/Sex :		Patient ID:	OMEGA126
Ref/Dept :	Dr. LIFE CARE LTD	Date :	23/12/23

Whole Body PET CT

HISTORY: Case of CA left breast. On alternative treatment.

INDICATION: To assess disease status.

PROTOCOL: ^{18}F-fluorodeoxyglucose was administered intravenously. To allow for distribution and uptake of radiotracer, the patient was allowed to rest quietly for 60 minutes in a shielded room. Imaging was performed on an integrated PET/CT scanner. CT images for attenuation correction and anatomic localization followed by PET images from vertex to mid thigh were obtained.

Comparison has been done with the previous PET-CT scan dated 14th April 2023.

FINDINGS:

Brain:

Visualised cerebral and cerebellar hemispheres appear normal with physiological biodistribution of FDG. The ventricular system is normal. No mass lesion or midline shift seen.

Head & Neck:
Orbits, paranasal sinuses, mastoid air cells & skull base appear normal.
No enhancing mass lesion or focal abnormal FDG uptake seen in the nasopharynx / oropharynx / hypopharynx and larynx.

Deep fascial spaces of neck (parapharyngeal, retropharyngeal, perivertebral, masticator & carotid spaces) appear normal.

1

Registered Office: Nueclear Healthcare Limited, D-37/1, TTC MIDC, Turbhe, Navi Mumbai - 400 703.
Web: www.nueclear.com | Email: info@nueclear.com | Call: 022-4128 9999 / 4128 2888 | SMS: 9223194040

Nueclear
NATIONWIDE NETWORKED

Powered By
Thyrocare
Tests you can trust

Mumbai | Delhi | Hyderabad | Nashik | Bengaluru

Name :		**PET No :**	**PET**
Age/Sex :	**68 yrs/ female**	**Patient ID:**	**OMEGA126**
Ref/Dept :	**Dr. LIFE CARE LTD**	**Date :**	**23/12/23**

Both lobes of thyroid appear normal in size with no focal hypodense lesion / focal abnormal FDG uptake.

Physiological FDG uptake is seen in the bilateral palatine tonsil.

Vascular structures of neck appear normal.

No significant cervical or supraclavicular lymph nodes.

Chest:

No significant FDG uptake is noted in the ill-defined soft tissue density lesion in the upper and central outer quadrant of left breast parenchyma measuring approximately 1.8 x 0.8 cm- shows significant reduction in size.

Right breast parenchyma region appears unremarkable.

Non-FDG avid bilateral axillary lymph nodes with maintained fatty hila are noted, largest measuring approximately 1.2 x 0.7 cm . Likely reactive.

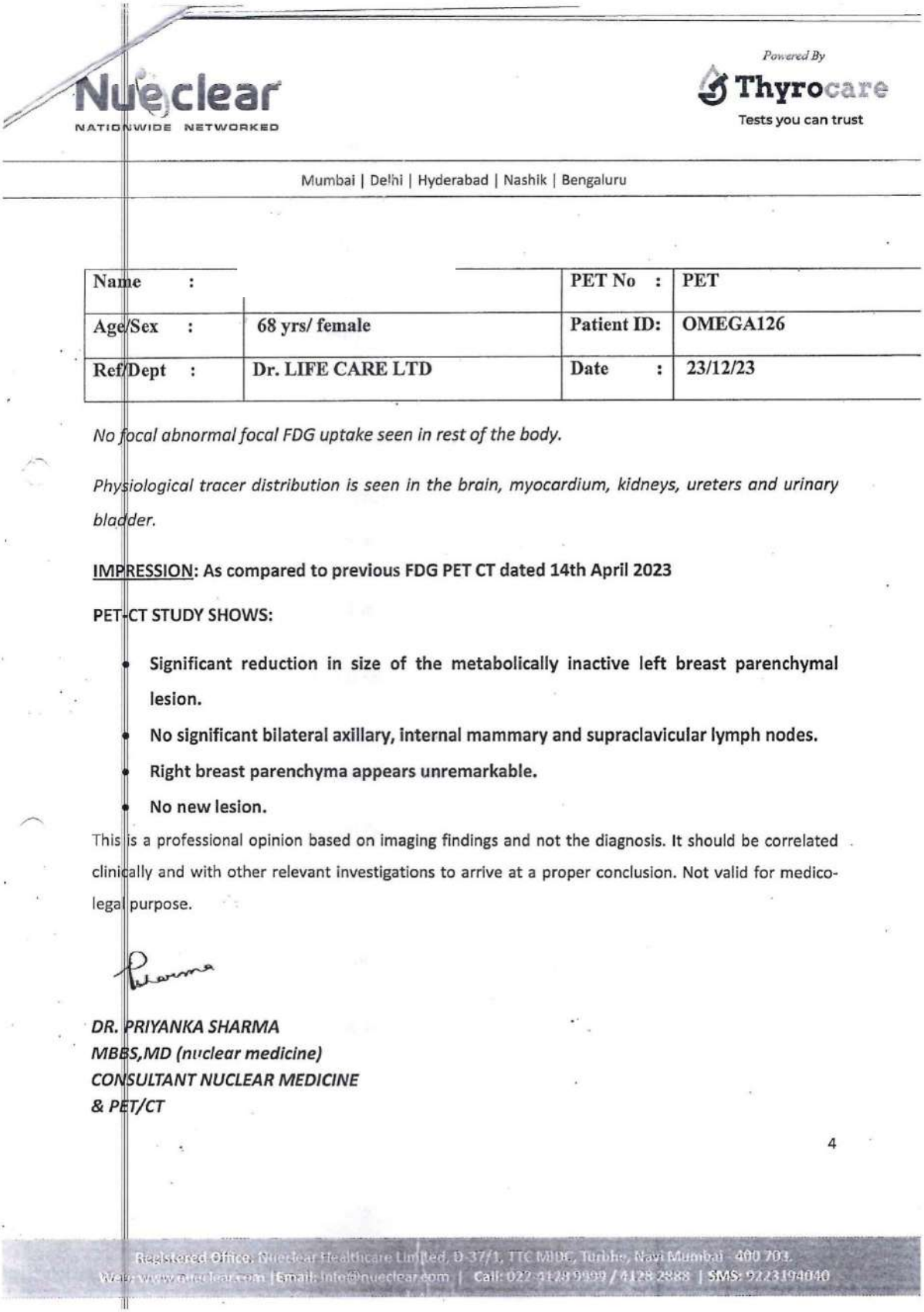
No significant abnormality is detected in bilateral lung parenchyma. No evidence of soft tissue density nodules. No evidence of pleural effusion or pleural thickening on either side.

No significant metabolically active hilar or mediastinal lymph nodes seen on either side.

Esophagus appears unremarkable with no mural thickening / mass lesion.

2

Registered Office: Nueclear Healthcare Limited, D-37/1, TTC MIDC, Turbhe, Navi Mumbai - 400 703.
Web: www.nueclear.com | Email: info@nueclear.com | Call: 022 4128 9999 / 4128 2888 | SMS: 9223194040
CIN : U74120MH2011PLC212839



Nueclear
NATIONWIDE NETWORKED

Powered By
Thyrocare
Tests you can trust

Mumbai | Delhi | Hyderabad | Nashik | Bengaluru

Name :		PET No :	PET
Age/Sex :	68 yrs/ female	Patient ID:	OMEGA126
Ref/Dept :	Dr. LIFE CARE LTD	Date :	23/12/23

No focal abnormal focal FDG uptake seen in rest of the body.

Physiological tracer distribution is seen in the brain, myocardium, kidneys, ureters and urinary bladder.

IMPRESSION: As compared to previous FDG PET CT dated 14th April 2023

PET-CT STUDY SHOWS:

- **Significant reduction in size of the metabolically inactive left breast parenchymal lesion.**
- **No significant bilateral axillary, internal mammary and supraclavicular lymph nodes.**
- **Right breast parenchyma appears unremarkable.**
- **No new lesion.**

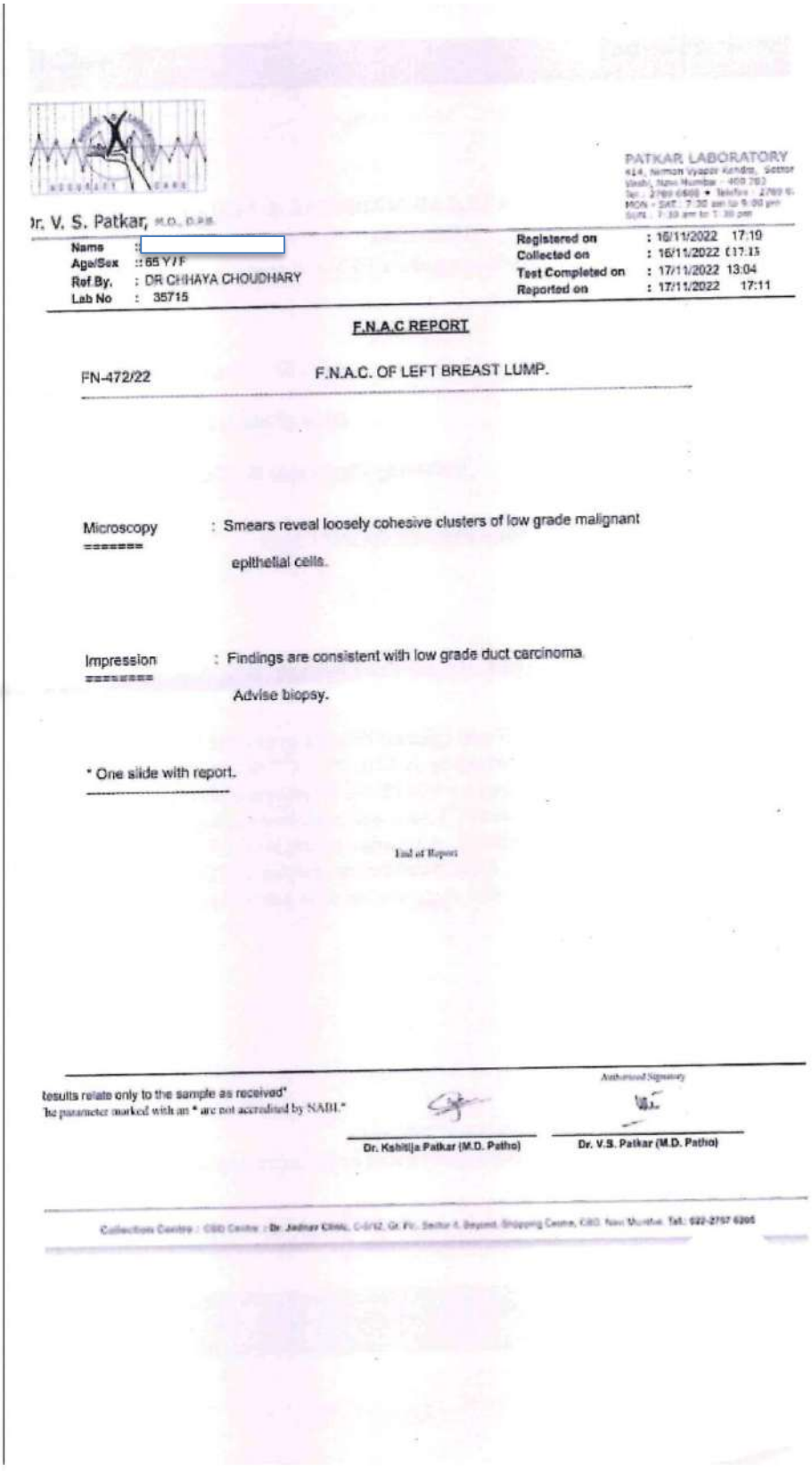
This is a professional opinion based on imaging findings and not the diagnosis. It should be correlated clinically and with other relevant investigations to arrive at a proper conclusion. Not valid for medico-legal purpose.

DR. PRIYANKA SHARMA
MBBS,MD (nuclear medicine)
CONSULTANT NUCLEAR MEDICINE
& PET/CT

4

Registered Office, Nueclear Healthcare Limited, D-37/1, TTC MIDC, Turbhe, Navi Mumbai - 400 703.
Web: www.nueclear.com | Email: info@nueclear.com | Call: 022-4128 9999 / 4128 2888 | SMS: 9223194040

Fig 4. The FNAC report



PATKAR LABORATORY

Dr. V. S. Patkar, M.D., D.P.B.

Name :
Age/Sex :: 65 Y/F
Ref.By. : DR CHHAYA CHOUDHARY
Lab No : 35715

Registered on : 16/11/2022 17:19
Collected on : 16/11/2022 17:13
Test Completed on : 17/11/2022 13:04
Reported on : 17/11/2022 17:11

F.N.A.C REPORT

FN-472/22 F.N.A.C. OF LEFT BREAST LUMP.

Microscopy : Smears reveal loosely cohesive clusters of low grade malignant epithelial cells.

Impression : Findings are consistent with low grade duct carcinoma.
Advise biopsy.

* One slide with report.

End of Report

Results relate only to the sample as received*
The parameter marked with an * are not accredited by NABL*

Authorised Signatory

Dr. Kshitija Patkar (M.D. Patho) Dr. V.S. Patkar (M.D. Patho)

Collection Centre : CBD Centre : Dr. Jadhav Clinic, C-6/12, Gr. Flr., Sector 4, Beyond Shopping Centre, CBD, Navi Mumbai. Tel.: 022-2757 6205

Fig 5. The histopathology report on May 17, 2024

Extensive in situ component not seen.

Lymphovascular emboli not seen.

Perineural invasion not seen.

All margins are free of tumor.

Lymph nodes:

Page 3 of 4

HISTOPATHOLOGY

Name	:		Age : 63Yr	Gender : Female	
UHID	: ANM1.0000849023	/ ANMIP138096	**W/BNo/RefNo**	: SEVENTH FLOOR H WARD/7016	
Lab No	: AMN1.C2401006	**LRN** : 2084679			
Ref Doctor	: Dr.SANDIP BIPTE				

Collected on : 13-MAY-2024 05:44:37 PM **Received on** : 13-MAY-2024 05:44:37 PM **Reported on** : 17-MAY-2024 12:20:20 PM

Axillary lymph nodes: All fifteen lymph nodes are free of tumor including these sampled in FSII and FSIII (0/15).

IMPRESSION:

Focal Mucinous Carcinoma Left Breast with negative regional lymph nodes.
TNM: pT1aN0Mx (AJCC 8th edition).

' Slides and paraffin blocks of tissue processed at Apollo Hospitals, Navi Mumbai will be stored for Ten years.
Tissue specimen received at Apollo Hospitals, Navi Mumbai will be discarded four weeks after final report.

* END OF REPORT *

Reference:

1. Arnold M, Morgan E, Rumgay H, Mafra A, Singh D, Laversanne M, Vignat J, Gralow JR, Cardoso F, Siesling S, Soerjomataram I. Current and future burden of breast cancer: Global statistics for 2020 and 2040. The Breast. 2022 Dec 1;66:15-23.
2. Dash MK, Joshi N, Gautam DN, Jayakumar R, Tripathi YB. Ayurvedic supportive therapy in the management of breast cancer. Journal of Herbal Medicine. 2021 Oct 1;29:100490.s
3. Aghajanzadeh M, Torabi H, Najafi B, Talebi P, Shirini K. Intermammary breast cancer: A rare case of cancer with origin of breast cells in an unusual location. SAGE Open Med Case Rep. 2023 Feb 12;11:2050313X231154996. doi: 10.1177/2050313X231154996. PMID: 36798680; PMCID: PMC9926372.
4. Sung H, Ferlay J, Siegel RL, et al. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin* 2021; 71(3): 209–249.
5. Dr.JyotiMeghdambar and Dr. VidyaHirlekar, StanArbuda and Ayurveda, European journal of Pharmaceutical and medical research 2017,4(3),384-386
6. Deshmukh V, Sardeshmukh S, Patil T, Nagarkar R, Gujar S, Pathak S, Deshpande D, Awalkanthe V, Awalkanthe S, Paleja N, Kate S, Patil P, Shivgankar S, Godse V, Kulkarni S, Sardeshmukh N, Karade D, Gota V, Gupta V, Bendale K, Gandhi K, Chavan S Ayurvedic intervention in breast cancer patients reduces adverse effects of chemotherapy, modulates systemic immune response and improves quality of life: A non-randomised controlled study JMIR Preprints. 17/10/2024:67521 DOI: 10.2196/preprints.67521
7. ShripathiAcharya G, Gopikrishna S. Acharya, &Rajeshwari S. Acharya. (2024). Role of Ayurveda medicine in the management of Carcinoma of Breast. Journal of Ayurveda and Integrated Medical Sciences, 9(4), 145 - 149. https://doi.org/10.21760/jaims.9.4.23
8. Dhanraj, C. B., Tanishka, & Gupta, P. (2024). **Ayurvedic approach in the management of breast cancer: A review.***GJRA - Global Journal for Research Analysis, 13*(4). https://doi.org/10.36106/gjra
9. Sode et al. Greentree Group Publishers © IJAPC Int J Ayu Pharm Chem 2020 Vol. 13 Issue 1 www.ijapc.com 112 [e ISSN 2350-0204]
10. Chowdary, B. R. (2021). 360 degree postural therapy. Diamond Pocket Books. X-30, Okhla Industrial Area, New Delhi-110020.
11. Chowdhury, B. R. (2023). Rabbit-Tortoise model for cancer cure. Diamond Books.

12. AkhileshDeshmukh&Vinod Kumar Ganure: A review of the literature on eranda (ricinuscommunislinn.,) and its therapeutic applications and phytochemical components. International Ayurvedic Medical Journal {online} 2023 {cited June 2023}
13. Wadkar, A. S., &Atri, V. (2021). Clinical study to evaluate the effect of Shiroabhyanga and Shirodhara with BrahmiTaila on anxiety. International Journal of Research and Analytical Reviews (IJRAR), 8(4), 1234-1240. https://www.ijrar.org (E-ISSN 2348-1269, P-ISSN 2349-5138).
14. Kumbhar, J. L., &Patil, J. P. (2018). Concept of Shiroabhyanga. Ayurlog: National Journal of Research in Ayurved Science, 6(4), 123-130. ISBN: 978-93-5137-179-3. ISSN: 2320-7329. Retrieved from http://www.ayurlog.com.
15. Pargaonkar AS, Jibkate BR, Umate P. Review on utility of preferred drugs from Dashangalepa as herbal hand sanitizer intended for pandemic COVID 19. International Journal of Research in Pharmaceutical Sciences. 2020;11:1356-64.
16. RavibhushanSadashivSonawane. EFFICACY OF SAHACHAR TAILA MATRA BASTI IN THE MANAGEMENT OF SANDHIGATA VATA WITH SPECIAL REFERANCE TO OSTEOARTHRITIS.: Array. Ayurline: IJ-RIM [Internet]. 2019 Nov. 10 [cited 2024 Dec. 13];3(05). Available from: https://www.ayurline.in/index.php/ayurline/article/view/281
17. PandeyGangasahay, editor. Pt. KashinathSastriVidhyotini Hindi commentary on CharakaSamhita of Agnivesha, Siddhi SthanAdhyaya 4/54. Varanasi: ChaukumbaBharti Academy, 2015; 1013.
18. CharakSamhita, Vimansthan, Chapter 5 , Shlok no.13 , Edited by VaidyaYadavjiTrikamjiAcharya, ChaukhambaSubhartiPrakashan, Varanasi
19. CharakSamhita, Vimansthan, Chapter 5 , Shlok no.13 , Edited by VaidyaYadavjiTrikamjiAcharya, ChaukhambaSubhartiPrakashan, Varanasi
20. Dr. SeethalPeenikkal, Dr. K. Savitha R. Shenoy, Dr. Sri Nagesh K. A. Formulation of NidanaPanchaka in Breast Cancer. J Ayurveda Integr Med Sci 2019;1:81-88. http://dx.doi.org/10.21760/jaims.4.1.17
21. Panchaware PS, Shekokar SS. A review on ayurvedic and modern aspects of breast cancer. World Journal of Biology Pharmacy and Health Sciences. 2023;14(3):359-71.