

Eleven years of disease free survival in a case of Invasive Ductal Carcinoma (IDC) Rt Breast grade 3, stage 3, treated with add on *Ayurveda* treatment: A case report

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ABSTRACT

Breast cancer shows high mortality, especially in women worldwide. This report discusses a case of female patient with a history of Invasive Ductal Carcinoma (IDC) Rt Breast, ER, PR negative, Grade 3 (Gr3) Stage 3 (St3) seen in our OPD treated with supporting herbo-mineral-metallic combination of *Ayurveda* medicines. Generally, breast cancers of such subtype and that too in Lower Outer Quadrant (LOQ) are always of a concern and can be more troublesome to the patient. When the patient came for the first time, her chief complaint was palpable lump in her right breast for previous three months. We advised her to undergo relevant investigations and, it was found to be malignant. She underwent surgery, Modified Radical Mastectomy (MRM), followed by chemotherapy. During chemotherapy, which was Adriamycin + Cyclophosphamide (AC) protocol 4 cycles, followed by Doce-taxel 4 cycles, every 21 days. After 2 cycles, she started complaints of pain in both calf regions, numbness in fingers of hand and foot, severe generalized skin rash with itching, hyperacidity and constipation. She visited our clinic again for the same, and *Ayurveda* treatment was started to her at this point. So, at the time of commencement of treatment, the diagnosis was "IDC Rt Breast, LOQ, Gr3 St3, ER, PR negative HER2Neu positive, post op, on chemo".

After appropriate analysis based on *Ayurvedic* and modern parameters, she was diagnosed to have vitiation of *Rakta* and *Pitta* (*Dushti avastha*), due to cyto-toxic nature of (*Visha* exposure) chemotherapy and medication was planned accordingly, along with chemotherapy protocol. The *Ayurveda* treatment showed significant relief in the chemotoxicity symptoms, within one month and she could tolerate further chemotherapy cycles very conveniently.

On completion of chemotherapy, she was diagnosed to have need of good immunity (*Vyadhi-Kshamatva*). Based on this diagnosis, *Ayurveda* treatment protocol was changed and this new regimen continued for almost 6 years afterwards. Laboratory and imaging investigations performed periodically showed marked improvement, and even currently not showing any abnormality. Till date, there is no recurrence and patient is living completely normally for last 11 years.

As all the symptoms and investigations showed near complete improvement; it may be concluded that probably add on *Ayurveda* treatment (Integrative approach) proved effective in this patient of IDC. We have observed 11 years of disease-free survival and excellent quality of life in this patient and still ongoing.

1. Introduction

Cancer is the second leading cause of disease-related deaths

worldwide, followed by heart disease. It is the collection of many related diseases caused by the uncontrolled cell division and absence of cell apoptosis heading to the transformation of normal cells into tumor cells

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[1]. As per the international agency of cancer research, the Globocan 2020 estimate that, in 20 geographical regions of the world there are nearly 19.3 million new cases and 10 million cancer related deaths reported worldwide in the year 2020 [2]. Among the cancer related deaths so far, lung cancer is in first place with 18.4 % of overall malignant deaths, second comes the breast cancer found in women with 11.6 % [2].

Breast cancer is the most frequently diagnosed cancer in women, and the main reason for cancer-related deaths in this population globally. It comprises a diverse range of diseases with different histologically defined subgroups, clinical manifestations, therapeutic responses, and prognoses [3]. Most tumors (up to 75 %) are derived from mammary ductal epithelium, mainly the terminal duct lobular unit. They infiltrate the basement membrane of the ducts and are diagnosed as invasive ductal carcinoma (IDC) [4,5]. The second most frequent epithelial type is invasive lobular carcinoma (ILC), which can account for up to 15 % of cases. Other types include Ductal/Lobular carcinomas in situ, which have still not invaded the basement membrane and are still localised.

Ayurveda approach interprets this disease from a different perspective. It helps to alleviate side effects of conventional treatments and also allows the patient to enjoy Disease Free Survival (DFS), with good Quality of Life (QoL). This article aims to report a case of IDC of the breast grade 3, stage 3. The patient was managed with add on *Ayurveda* medicines along with the conventional treatments (Integrative approach) and we have observed 11 years of disease-free survival and excellent quality of life in this patient (Karnofsky score 90/100).

2. Case presentation

2.1. Patient information

A 42-year-old female patient (OPD No J1/12), with a palpable lump around 2 × 1.5 cm in lower outer quadrant (LOQ) of right breast, which was hard and adherent, visited the OPD on March 08, 2013. She was advised to undergo relevant investigations and was diagnosed as Gr 3, St 3 IDC. She underwent Modified Radical Mastectomy (MRM) surgery and started chemotherapy afterwards. After finishing 2 cycles of chemotherapy, she came back to our clinic seeking treatment for chemotherapy side effects. She is home maker had 5 Ft height and 60 kg weight with moderate built.

2.2. Medical history

The patient conceived late, the first conception being at the age of 33 years, but it was a miscarriage in the beginning of second trimester. She had one more miscarriage thereafter, in the 6th week of gestation. She had visited us at the age of 35 years and we had got her investigated for the same and was found to be ToRCH positive (Toxoplasmosis, Rubella, Cytomegalovirus and Herpes Simplex Virus). She took Rovamycin and hormonal treatment (details NA) from gynecologist and conceived. At the age of thirty six she delivered a female child in 2007 by LSCS. Her lactation and breast feeding was normal at that time.

Patient used to have complaints of dysmenorrhea after her delivery, frequently, for which she had taken *Ayurveda* treatment in the past. (details NA). She also had some hearing loss in her right ear as a result of otitis media surgery performed long back, during her college days.

There was no other history of any disease like DM, HT, IHD, COPD etc., and no significant family history as well.

2.3. Diagnostic Assessment

In January 2013, she noticed a lump in the right breast, and she took some medicine from a nearby general practitioner (details not available), but it didn't help her. Then she visited our clinic for the same in March 2013.

2.3.1. Initial concerns and symptoms of the patient:

- 1. Palpable right breast lump in LOQ, 8 o'clock position
- 2. Hard, adherent
- 3. No pain, discharge, nipple retraction

We advised her to get Ultrasonography (USG) mammogram and Fine-needle aspiration cytology (FNAC) done, both of which revealed cancer in her right breast. Modified Radical Mastectomy (MRM), with lymph node dissection up to level III was performed on June 14, 2013.

Histo-Pathological Evaluation (HPE) of the whole excised mass showed Gr 3 IDC, with Estrogen Receptor (ER), Progesterone Receptor (PR) negative, Human Endothelial growth factor receptor 2 (HER2 neu) +++, 1/15 nodes positive with Peri-Neural Invasion (PNI). Surgical margins free of tumor, indicating complete excision, stage was pT2N1.

After complete wound healing, she underwent 8 cycles of chemotherapy. Radiation therapy was not advised to her by oncologist in view of complete excision of tumor in MRM.

AC regimen (Adriamycin and Cyclophosphamide) 4 cycles, from July 12, 2013 followed by Docetaxel 4 cycles. Every cycle was given at 21 days interval (Refer Table 5).

Trastuzumab was not given because of unwillingness of patient. Huge cost of the treatment in those days was one of the important factors behind the denial.

The patient started complaining of adverse effects, such as pain in both calf regions, hand and foot syndrome, finger numbness, severe skin rash, itching, hyperacidity and constipation after first two cycles of chemotherapy. Hence she visited our clinic again and concurrent *Ayurveda* treatment was started on August 12, 2013, just after the second chemotherapy cycle. Clinical and systemic findings are mentioned in Table 1. Ten folds examination (*Dashavidha Pariksha*) details are mentioned in Table 2 and diagnostic assessment in Table 3. Table 4 gives malignancy investigations. Table 5 provides complete chemotherapy schedule.

The commonly observed adverse effects of Adriamycin are leucopenia, sickness, sore throat, sensitive skin. Those for cyclophosphamide are loss of appetite, nausea, vomiting, diarrhea, changes in skin colour, and for Docetaxel, a skin rash, itching, swelling of the lips, face or throat, breathing difficulties, fever and chills.

2.3.2. Criteria of assessment

Chemotherapy finished in December 2013, and afterwards, every

Table 1
Initial clinical and systemic findings of patient (Jan 2013)

Finding	Observations
General examination	
Appetite	Moderate
Built	Moderate
Nutrition	Moderate
Temperature	98.4 °C
Pulse rate	78/min regular
Blood pressure	130/80 mm of Hg
Pallor	No Pallor
Clubbing	No clubbing
Cyanosis	No cyanosis
Icterus	No icterus
Tongue	Clear, moist
Bowel	Regular
Bladder	Regular
Sleep	Good, sound sleep
Systemic examination	
C.N.S.	Conscious, oriented, anxiety +
C.V.S	S1S2+
Respiratory system	Clear
Digestive system	Occasional flatulence, acidity
P/A examination	Within Normal Limits
Lump examination	Around 1.5 cm, hard, adherent lump in LOQ of Rt breast.

Table 2
Tenfold examination (*Dashavidha Pariksha* [6])

Condition	Observation
<i>Prakriti</i> (Constitution)	<i>PittaKapha</i>
<i>Vikriti</i> (Morbidty)	<i>Rasa, Rakta, Meda, Stanya, Aartava</i>
<i>Sara</i> (excellence of Dhatus)	<i>Mamsa asara</i>
<i>Samhanana</i> (compactness of organs)	<i>Shithila</i>
<i>Pramana</i> (measurements of the organs of the body)	<i>Madhyama</i> (moderate built)
<i>Satmya</i> (suitability)	<i>Madhura</i> excessive, especially after meals
<i>Sattva</i> (Psychological status)	<i>Awara</i> since many years
<i>Aahar shakti</i> (power of intake and digestion of food)	<i>Madhyama</i> (Medium)
<i>Vyayam shakti</i> (power of performing exercise)	<i>Alpa</i> (Less)
<i>Vaya</i> (age group)	<i>Madhyavastha</i> (Middle age)

Family history: There was no known family history of any cancer or any other major illness.

Table 3
Diagnostic assessment (January 2013).

Parameters	Results
Blood group	A + ve
VDRL	Negative
HIV	Negative
HBsAg	Negative
Anti HCV	Negative
Hb	11 gm%
Fasting BSL	78 mg%
Urine	Within Normal Limits

Table 4
Malignancy investigations

Investigation	Date	Remark
Sonomammography	March 09, 2013	Well defined solid hypoechoic lesion in Rt breast, s/o malignancy. Benign fibroadenoma in Lt breast IDC Gr. 2
Histo-Pathological Examination (HPE)	June 07, 2013	
Whole body MRI	June 10, 2013	Rt Breast LOQ 1.6 × 2.2 cm lump, Few axillary LNs, Anterobasal seg Rt LL 1*06 cm No brain/bone/liver metastases Rt breast lesion with few rt axillary LNs, soft tissue nodule in rt lower lobe of lung,?inflammatory, ? metastatic
Modified Radical Mastectomy	June 12, 2013	
Histo-Pathological Evaluation post Modified Radical Mastectomy	June 14, 2013	IDC Rt breast, Gr 3
Immuno-Histo-Chemistry	June 18, 2013	ER, PR negative, Her2neu: strong staining in 90 % cells, score 3+
F/U CT scan	October 1, 2013	No pulmonary pathology, which was visible in June 10, 2013 CT scan (Soft tissue nodule in antero basal segment of right lower lobe 10 × 6mm (Inflammatory, metastatic), no other pulmonary or pleural abnormality)

year she undergoes all investigations like mammography of left breast, USG abdomen and pelvis, Chest X-ray etc, as per oncologist's protocol, and all reports are normal till date. Last such follow up was done in October 2023, which was within normal limits.

2.4. Therapeutic intervention:

The patient was not able to tolerate chemotherapy because of

Table 5
Chemotherapy schedule

Cycle no.	Date	Medicine	Duration between 2 cycles
1	July 12, 2013	Adriamycin + Cyclophosphamide	0
2	August 02, 2013	Adriamycin + Cyclophosphamide	21
3	August 23, 2013	Adriamycin + Cyclophosphamide	21
4	September 13, 2013	Adriamycin + Cyclophosphamide	21
5	October 04, 2013	Docetaxel	21
6	October 25, 2013	Docetaxel	21
7	November 15, 2013	Docetaxel	21
8	December 06, 2013	Docetaxel	21

toxicity. Considering this fact, *Ayurveda* treatment was started.

Ayurveda intervention was threefold, oral medicine, diet, and life-style regimen [7]. She was given oral medicines as mentioned in Table 6. Along with the medication, simple balanced diet was advised and consumption of excessive sweet, sour, pungent, salt and oil rich food was advised to be avoided. Sufficient rest and light exercises were also advocated.

Gradually, her chemo-toxicity symptoms (mentioned initially) reduced and vanished completely, as shown in Table 7, and she could finish her regime as per given schedule.

After finishing chemotherapy, *Ayurveda* treatment protocol was focused towards maintaining good health and preventing/prolonging recurrence. The treatment was changed as mentioned in Table 8.

This treatment was continued for 3 more years. Afterwards, cow milk prepared with *Glycyrrhiza glabra* and *Tinospora cordifolia* (*Yashti-Guduchi Ksheerpaaka*) was advised. The patient herself discontinued it after approximately two and a half years. (January 2017 to May 2019). She is not on any medication for last 3–4 years. But she regularly visits yearly once to the clinic and yearly once to oncologist. Her last visit at oncologist was in October 2023. After her oncologist visit, she visited our clinic too.

2.5. Outcome

Chemotoxicity symptoms significantly improved after starting *Ayurvedic* treatment following the second chemotherapy cycle. Patient was symptom-free even during subsequent chemotherapy cycles, and all six chemotherapy cycles that followed were tolerated well.

Table 6
Therapeutic intervention (August 2013 to January 2014 = 6 months)

No.	Medicine*	Dose	Time
1.	<i>Vasanta kusumakara rasa</i>	125 mg	Morning empty stomach (Once daily)
2.	<i>Mouktika Kamdudha</i>	125 mg	Morning empty stomach (Once daily)
3.	<i>Ushira</i> (<i>Vetiveria zizanioides</i>)	500 mg	After both the meals (Twice daily)
4.	<i>Dhatri</i> (<i>Emblca officinalis</i>)	500 mg	After both the meals (Twice daily)
5.	<i>Yashtimadhu</i> (<i>Glycyrrhiza glabra</i>)	500 mg	After both the meals (Twice daily)
6.	<i>Musta</i> (<i>Cyperus rotundus</i>)	500 mg	After both the meals (Twice daily)

*All medicines given in powder form.

Table 7
Improvement in patient.

No.	Symptom	Grade (Out of 10)		
		Pre-treatment	During treatment (after 1 month)	End of treatment (6 months)
1.	Pain in both calf region	7	1	0
2.	Hand and foot finger numbness	8	2	0
3.	Skin rash and itching	9	4	0
4.	Hyperacidity	5	0	0
5.	Constipation	4	0	0

Table 8
Medicines after finishing chemotherapy (January 2014 to Jan 2017 = 36 months).

No.	Medicine*	Dose	Time
1.	<i>Vasanta kusumakara rasa</i>	75 mg	Morning empty stomach (Once daily)
2.	<i>Abhraka bhasma</i>	125 mg	Morning empty stomach (Once daily)
3.	<i>Patola (Trichosanthes dioica)</i>	500 mg	After both the meals (Twice daily)
4.	<i>Dhatri (Embllica officinalis)</i>	500 mg	After both the meals (Twice daily)
5.	<i>Sariva (Hemidesmus indicus)</i>	500 mg	After both the meals (Twice daily)
6.	<i>Musta (Cyperus rotundus)</i>	500 mg	After both the meals (Twice daily)
7.	<i>Guduchi (Tinospora cordifolia)</i>	500 mg	After both the meals (Twice daily)

*All medicines in powder form.

3. Patient's perspective on treatment received

"When I decided to take the *Ayurvedic* medicines, I was worried about getting relief from my problems. I was not able to tolerate the chemotherapy and there I got relief by the *Ayurvedic* medicines. I tolerated chemotherapy without any side effects. Now I visit oncologist every year in the month of September, get investigated as per his advice. My all reports are normal now and I am living normally. Thanks to *Ayurvedic* treatment for helping me to become normal."

4. Discussion

Breast cancers have various types and subtypes. All are totally distinct biological entities with altogether different behaviour, response to treatments and obviously, prognoses [8,9]. The response and prognoses change as per grade and stage and ER, PR, HER2 status of disease. Commonly reported prognosis in such type of cases is as follows:

- ER, PR negative breast cancer, which was the diagnosis in this particular case, is a bit uncommon in peri-menopausal women and suggests difficult prognosis.
- Despite being HER2/neu positive, she refused to take Trastuzumab, which is a drug of choice in standard care.
- The tumor grade was III, which indicates a challenging prognosis. The malignancy was previously thought to be in stage 4 because the lung nodule was evident but its cause was unclear. The lesion disappeared after 3 chemotherapy cycles (Table 4).
- IDC: As the tumor has already invaded the basal epithelium, its spread has already started. The prognosis of any invasive carcinoma is bad as compared to carcinoma in situ (DCIS).
- In LOQ the lymphatic drain is comparatively widespread, so chances of visceral recurrence are higher.

Initially she was given *Vasanta Kusumakara rasa*, *Mouktika Kamadudha*, *Ushira*, *Dhatri*, *Yashti*, and *Musta* from August 2013 to January 2014 for six months, for chemotherapy side effects.

- Vasanta Kusumakara* [10] is a herbo-mineral-metallic combination, containing *Vanga bhasma* [11] (calcined stannum), which is a perfect medicine for female reproductive system. It is also a potent cleansing agent which removes away excessive moisture (*Kledaghna*), caused by excessive consumption of sweet food in diet (*Madhura ati-sevana*). The patient had habit of the same. It also contains *Suvarna bhasma* (calcined aurum) which is a potent detoxifier and immunity booster (*Rasayana* and *Ojavadhaka*), which protects healthy tissues.

Addition of *Mouktika bhasma* (calcined pearl CaCO_3) makes it cold potency (*Sheeta*) and pacifying (*Manda*) property fortified by levigation by medicinal liquids (*Bhavana Dravyas*) of various cold (*Sheeta*) medicines. It is also having property to detoxify the body (*Vishaghna*).

Vasanta Kusumakara was the formulation of choice.

- Mouktika Kamadudha* was also added to augment the cooling property (*Sheeta guna*) of *Vasanta Kusumakara*. It pacifies the *doshas*, blood (*Rakta*) and also helps to protect the healthy tissue.
- Herbal medicines like *Musta* (*Cyperus rotundus* Linn), *Dhatri*, (*Embllica officinalis* Gaertn) *Yashtimadhu* (*Glycyrrhiza glabra*), *Ushira* (*Vetiveria zizanioides*) were added to supplement the efficacy of these principle drugs. All are rejuvenating (*Rasayana*), cooling (*Sheeta*), bulk promoting (*Brinhana*) and also principally acting on *Rasa dhatu* (*Rasadhatusami*) but at the same time have cleansing effect as well. They also help to keep the other two *doshas*, viz. *Vata* and *Kapha* well under control.

Patient's chemotoxicity symptoms gradually diminished and disappeared completely after one month of treatment. The same medicines were continued till cytotoxic therapy was finished. She didn't suffer from any of the symptoms afterwards. Cytotoxic therapy, as the name suggests, is toxic to the immortal cancer cells. But it also shows its ill effects on healthy cells and thereby on whole body. As per *Ayurveda* understanding, toxins are chiefly hot (*Ushna*) and sharp (*Teekshna*) in property and harmful to the vigor (*Ojo vipareeta*). Medicines with rejuvenation (*Rasayana*) effect with cooling (*Sheeta*), and pacifying property (*Manda guna*) were used to treat the case. The nature of her disease and other factors like constitution (*Prakruti*), etiological factors (*Hetu sevana*) and history were also taken into consideration. Improvement in all adverse effects was observed in the patient as shown in Table 8.

The goal of the treatment regimen following chemotherapy was to preserve good health and delay or prevent recurrence.

- Vasanta Kusumakara* was continued and *Mouktika Kamadudha* was now replaced by *Abhraka* (Mica) *bhasma*. *Abhraka bhasma* is considered as a good *Rasayana* for all tissues (*Dhatus*), especially for lungs and brain (common sites for metastases), by many *Ayurveda* physicians. It is also considered beneficial for digestive fire and overall metabolism (*Jatharagni* and *Dhatwagni*). Also, good for the health of reproductive system.
- Herbs like *Ushira* (*Vetiveria zizanioides*) and *Yashtimadhu* (*Glycyrrhiza glabra*) were removed and *Patola* (*Trichosanthes dioica*), *Sariva* (*Hemidesmus indicus*), *Guduchi* (*Tinospora cordifolia*), were added to the prescription. (*Musta* (*Cyperus rotundus*) and *Dhatri* (*Embllica officinalis*) from the previous prescription were continued).

Patola (*Trichosanthes dioica*) and *Guduchi* (*Tinospora cordifolia*), both being bitter (*Tikta Rasa*), but still sweet after metabolic transformation (*Madhura vipaka*) are, very good *Rasayana*, cleansing the body internally and good for digestion and metabolism, thereby enhancing immunity. *Sariva* (*Hemidesmus indicus*), is a good pacifier, *Rasayana*, cooling property (*Sheeta veerya*), blood purifier and detoxifier was one of the

components of the treatment.

All the reports in these 3 years of treatment were normal. Hence it was decided to step down the *Ayurveda* treatment and only medicated milk preparation of *Glycyrrhiza glabra* and *Tinospora cordifolia* (*Yashti-Guduchi Ksheerpaaka*) was then advised as a maintenance medicine, to be taken once daily. *Glycyrrhiza glabra* and *Tinospora cordifolia* are both good rejuvenating herbs, causing cleansing of channels and nutrition of the body at the same time. The patient consumed it meticulously for almost two and a half years. After that, she stopped consuming it. She hasn't taken any medication in the past 3-4 years.

As mentioned, the patient visits her oncologist every year, and gets relevant clinical examination and investigations done, as per protocol. She then comes to our clinic, shows her health and the reports. Her last such follow up has been done in October 2023, all reports (XRC, USG abdomen and pelvis, mammography of left breast) were entirely normal and her clinical status too.

4.1. Some additional insights

The breast malignancy is a combined effect of hormonal imbalance (chiefly estrogen exposure), various toxin exposures in day-to-day life (like air, water and food pollution), lack of exercise and stress. All these probably lead to altered immunity. Normal immunity generally identifies and destroys malignant cells but altered immunity fails to identify and/or get rid of malignant cells.

Breast is the main seat (*Mulasthana*) of channels carrying reproductive tissues (*Shukravaha Srotasa*), so *Vanga bhasma* (in *Vasanta Ksumakara*) and *Abhraka bhasma* have been used for rejuvenation (regeneration of healthy *Dhatu* or tissues). Breast milk, menstrual blood and ovum (*Aartava*) are derived from *Rasa dhatu*.

The patient had history of late pregnancy, multiple abortions and irregular menstruation. This implies vitiation (*Dushti*) of *Rasa dhatu* and its *upadhatu* (*Stanya* and *Aartava*). Considering overall *rasa-stanya-aartava dushti*, medicines like *Yashtimadhu*, *Patola*, *Dhatri*, *Musta* were used for the treatment.

In this particular case, use of *Panchakarma* (cleansing procedures which expel out the unwanted accumulated waste from body) was also an option. One special form of *basti* (one of the *Panchakarma* procedures, similar to enema), called as *Ksheera-ghrita basti* or *Yapana basti* is very good for nutrition as well. Its administration in this patient was in our treatment plan, after 6 months of completing chemotherapy. But due to practical difficulties, it couldn't happen. There are few more cases in the pipeline, with addition of *Panchakarma*, showing excellent results. They will also be published in due course of time.

5. Conclusion

Addition of *Ayurveda* medicine (Integrative approach) has offered this ER-PR negative Gr3 St3 IDC patient, substantial disease-free survival, good Quality of Life. The survival of 11 years till date with Karnofsky score of 90/100 is a remarkable outcome of the treatment. We highlight that the patient's condition was critical and that addition of Ayurvedic therapy helped her to sustain the chemotherapy and offer disease free survival with good QoL afterwards. India should be able to utilize the abundance of information, even more extensively, found in this Indian Systems of Medicine, to treat cancer and contain the spread. Case reports is a great opportunity to present potential of *Ayurveda* to the scientific world.

Clinicians need to adopt habit of keeping all documentation of reports, as well as clinical findings and publish as much full proof cases as possible. The collection of droplets of such cases will help to attract the interest of scientific world, and subsequently it will benefit the science. In this case, it may be claimed that the treatments were probably

targeted in proper direction and showing noticeable effect till date. Integrative approach has helped the patient to a great extent.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the forms, the patient has given her consent for sharing her images and other clinical information to be reported in the journal. The patient understand that her names and initials will not be published and due efforts will be made to conceal their identity..

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Authors' contributions

RN:Conceptualization, Investigation, study design; methodology; Supervision, Formal analysis, Resources, Validation; AMB:Writing – Original Draft, Review and Editing; ATP:Writing and Critical Editing of Draft, Data presentation; AAT: Writing and Critical Editing of Draft, Data presentation; MRN:Data Collection, Formal analysis, Writing – Original Draft, Data Curation Visualization and conceptualization.

Declaration of competing interest

None.

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