

**Case Report***Copyright © All rights are reserved by Dr Gloria Hettige*

# Metastatic Breast Cancer-Case Report

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**\*Corresponding author:** Dr Gloria Hettige PhD, PO Box 12-402, Thorndon, Wellington 6144, New Zealand.**Received Date:** May 30, 2023**Published Date:** June 08, 2023**Abstract**

This case serves as a prime example of how a 52-year-old woman who was initially not even a client, but who chaperoned a relative regularly to their own appointments at the clinic, quickly had a time-sensitive medical concern detected, diagnosed and ultimately resolved. She mentioned a lump underneath her left arm as a passing concern. The functional medicine practitioner took note of the concern and acted responsibly to save the client's health, by responding quickly to evidence of trouble which could easily have been ignored by the client, resulting in a potentially significant negative impact for her future. This case is also about client-centered, systematic case taking, and a positive outcome resulting from the methodical management of the case both clinically and functionally [1,2]. The client required very little convincing of the need to follow through with the recommended clinical testing regime, used to determine the degree of disease progression, bio-regulatory system medicine (BrSM), and functional medicine approaches to address systemic core imbalances. This approach was chosen in order to mitigate excessive inflammation and promote resolution. This case study demonstrates the successful treatment of metastatic breast cancer, primary in-situ left breast with combined conventional, Bio-regulatory System Medicine (BrSM) and functional medicine approaches. The client was declared clinically well fourteen months after diagnosis without any chemotherapy, only one short course of palliative radiotherapy (20Gy in 5 fractions), and hormone therapy.

**Introduction**

An increasing number of cancer patients demand complementary therapies as part of their disease management strategy [2]. Research has demonstrated that some of these therapies are both effective and safe as adjunctive treatments in this situation [3]. In this particular case, a systematic multi-discipline treatment plan was undertaken to promote effective resolution of the disease as soon as a clinical diagnosis was reached. This plan was guided by rigorous laboratory tests and stage scans as well as consultation with the oncologist. A single-organ-system clinical regime approach may have had a much more limited usefulness in guiding the effective management of the client, given the presence of chronic multidimensional signs and symptoms.

With regard to BrSM intervention in treating chronic inflammatory disease might be to permit the restoration of

auto regulatory processes in the extracellular matrix, including physiological inflammation, by removing any toxins, stresses, deficiencies, or other perturbation that are interfering with its structure and function which is applicable to cancerous microenvironments. The link between inflammation and tumor development is reported by Sommer [4] and Baylock [5]. Targeting auto regulatory mechanisms that aim to restore original immune surveillance and neuroendocrine regulation as part of the comprehensive treatment protocol might increase responsiveness of the client as discussed by McGranahan & Swanton [6]. On the other hand, the foundation of the Functional Medicine approach is the restoration of health, and that requires defining and addressing core imbalances that underlie any given disease state. Assessing the underlying key common pathways of the disease state e.g., gastrointestinal dysfunction, pro inflammatory imbalances, and

oxidative stress could augment the more conventional, symptom-targeted approach [7]. This case clearly illustrates this client may have improved clinically and gained a marked quality of life in a shorter time as evidence based complementary treatments were used in combination with conventional therapies.

## Client Information

A fifty-year-old professional female brought her relative for treatment at the clinic on September 5, 2014. While her relative was being treated she mentioned to the practitioner that she had noticed a lump in her left breast for some months now and an increasing swelling in her left armpit. She was also concerned about some back pain. An appointment was set, and after a thorough case taking, she was immediately referred to her GP, who then referred her to an oncologist.

## Past Interventions

There had been previous mammogram screenings where a lump had been detected and classified as benign. However, there were no relevant past clinical interventions.

## Clinical Findings

She symptomatically had a breast mass which was not sore and a large axillary mass which fluctuated in size. Core biopsy of the main lesion by fine needle aspiration of the axillary lymph node demonstrated a grade 2 infiltrating ductal carcinoma ER 95% positive, PR 95% positive, HER2 0 negative. Her period cycle was becoming irregular. She was diagnosed with Type 2 diabetes (insulin insensitivity). Bowel motions were irregular and suffered from chronic hay fever. She suffered from whiplash injury and experienced numbness along her left side of her body after accidental jumping off a wall. Increasingly she experienced some left lower rib pain and left scapular pain. There was no family history of breast cancer.

## Diagnostic Assessment

### by Clinic / Practitioner

- Comprehensive Case Taking was required in order to support the development of a functional medicine protocol.
- Blood tests were examined. Historical blood tests going back as far as five years prior were requested, graphed and studied in order to see which parts of the client's nutritional spectrum needed the most support. Existing tests were found to be not adequately comprehensive, so new tests were ordered. Ultimately the tests revealed.
  - Elevated fasting insulin
  - Elevated HbA1c
  - Elevated ALT
  - Low vitamin D
  - Elevated globulins

- Low iron/ferritin
- Elevated calcium
- Low B12/folate

### by Specialist / GP

The client's oncologist made the diagnosis following Biopsy, MRI and CT scans:

- Metastatic breast cancer, primary in situ left breast
- Grade 3, ER-PR positive, HER-2 Negative
- Bone only disease
- Bone metastases, axillary and mediastinal lymphadenopathy
- Lytic lesion C7 vertebral body with disruption of the posterior wall. Metastases also noted in
- the T4 vertebral body and L4 spinous process without collapse or canal invasion.

## Therapeutic Intervention

Six weeks prior to the suggested conventional intervention, she started on a functional medicine protocol. She was committed to a plan involving a period of holistic wellness, including a customised nutritional protocol developed to target the acidity of the matrix, which dictates organ wellness. In order to manage inflammation and the pain that results from it, she was given regular SCENAR [8] therapy, once or twice a week. Finally, regular counselling was scheduled for the client, both by herself and with her family, to manage the impact of the diagnosis and ensure she had the best possible support from those around her.

## Treatment Strategy

Treatment of Bio-regulatory systems (BrSM) therapy was achieved through a comprehensive range of nutritional strategies, provided by a very particular selection of supplements. The selection (see Table 1) was designed to provide targeted support for extracellular & intracellular detoxification, mucosal resuscitation, hormonal balancing, intracellular energy and inflammation modulation. The intention was that, with these supports in place, all of the client's bio-regulatory systems would be fully armed to assist her in overcoming her main challenge.

## Nutritional Intervention

In addition to following through a nutritional supplement regime (Table 1/P1), she removed some previously frequently consumed foods from her diet. She avoided all inflammatory foods and drinks including gluten, dairy, sugar, wheat, and processed foods, concentrating instead on fresh vegetables, fruits and a low glycaemic index diet.

## Lifestyle Changes

The client scheduled time each day to do meditation, weight

bearing exercises (giving her improved muscular strength) and abdominal breathing.

## Changes in Intervention

The protocol was subject to revision over its lifetime, when osseous destruction of the spine was detected, and as the client's symptoms reduced. As and when staging MRI, CT and bone scans showed consecutive and on-going reductions in swelling, and blood

markers improved, this clinical evidence informed the decisions to scale back the initial broad spectrum of supplemental support to a much smaller but steady maintenance dose of a few core supplements. Table 1/P2 documents the supplements which were retained for the purpose of core system support. These supplements specifically support the immune and hormonal metabolism, along with core mineral and micro-nutrient levels.

**Table 1:** Nutritional Intervention.

P1	P2	Recommendation	Rationale
✓	✓	Comprehensive dietary supplement to support gastrointestinal and hepatic function, and cytokine balance Total Fat 8g Saturated Fat 2g Total Carbohydrate 18g Total Sugars 5g Dietary Fibre 6g Protein 25g (QD)	Assists gut health, liver, and cellular detoxification
✓	✓	Probiotic Blend incl (BD) Lactobacillus acidophilus Bifidobacterium longum Lactobacillus plantarum	Microbiome support
	✓	Multivitamin/mineral supplement (BD) Boswella 1.5g Chamomile 1.5g Broccoli Ext 750mg Magnesium 300mg Calcium 250mg Vitamin C 500mg Tyrosine 400mg Vitamin B5 50mg Vitamin B6 25mg Zinc 5mg Chromium 100µg Vitamin B12 250µg Folic Acid 250µg Iodine 75µg	nutrients for healthy oestrogen metabolism
✓	✓	Hormone metabolism support (BD) Glycine max 23g Milk Thistle 3g Turmeric 1.5g Rosemary 1g Vitamin B6 39mg Zinc 12mg Vitamin B12 250µg Iodine 100µg Molybdenum 62.5µg	to support healthy breast tissue
✓		Indole-3-Carbinol 150mg (BD) Rosemary Leaf Ext 50mg	Oestrogen detoxification
✓		Anti-inflammatory Herbs (BD) Turmeric Ext 1.2g Green Tea Ext 1.2g trans-Pterostilbene 300mg Glucoraphanin (from Broccolic Ext) 60mg	For the management of pain and mild inflammation
	✓	Fish oil (BD) EPA 630mg DHA 420mg Vitamin D3 20.8µg	High potency EPA/DHA to assist with multiple anti-inflammatory mechanism
	✓	Glycan based nutrition (2 scoops BD)	Support cellular integrity
	✓	Cow colostrum + (BD) Egg yolk peptide extracts 300mg	immune modulation
✓		Lycium hypothyroid support complex (BD) Goji extr 6g Withania extr 3g Ginger extr 2g Rosemary extr 1g Vitamin E 266 IU Vitamin B3 200mg Zinc 12mg Vitamin B2 10mg Vitamin A 872 IU Selenium 75µg Iodine 140µg	maintenance of normal healthy thyroid function and metabolism
	✓	Broad spectrum digestive enzyme (TD) Betaine Hcl 480mg L-Glutamic Acid Hcl 480mg Pancreatin 140mg Ox Bile conc 80mg Pepsin 70mg	To support digestion
	✓	High potency vegetarian iron with 5-MTHF (QD) Iron 24mg Vitamin C 80mg Mecobalamin 500µg Pyridoxine Hcl 5mg Levomefolic Acid 200µg	To support low iron levels
✓		Liposomal Vitamin C 1500µg (QD) Sodium 197mg R-Lipoic Acid 70mg	Antioxidant support
	✓	Sugar metabolism support (QD) Bovine colostrum + Egg yolk extr 200mg Herbal Blend 1823mg of Heart wood extr Gymnema extr Fenugreek seed extr Alpha Lipoic Acid Momordica Charantia extr Korean Ginseng Vanadium	Support healthy glucose and Carbohydrate glucose metabolism
	✓	Mineral support for bones (QD) Vitamin D3 50µg Choline 60mg Calcium 550mg Phosphorus 198mg MCHC 2.2g Silicon 3mg Microcrystalline Hydroxyapatite 1.32g	Increase bone calcium binding sites, bone collagen generation, optimize calcium absorption and utilization
✓		Bioregulatory medicines (QD) Home toxicological Blend	Matrix detoxification and inflammation management

## Conventional Treatment

In addition to the functional protocol and treatments received from the practitioner, the client also underwent the following as recommended by specialist advice:

- Surgical Stabilisation of the client's spine, due to C7 progressive disease with osseous destruction with potentially

impending complete vertebral collapse and cord compression

- Post-operative radiotherapy for six weeks
- Hormone therapy

She did not undergo chemotherapy. The clinical staging and treatments are outlined in Table 2.

**Table 2:** Scan / Conventional Medication Timeline.

Date	Event	Challenge Changes
16/09/2014	Mammogram / Ultrasound left breast / Biopsy	+R4 lesion left breast with presumed axillary lymph node involvement
25/09/2014	MRI Scan	+Left breast cancer, node positive
01/10/2014	CT Scan	+Metastatic breast cancer Primary in-situ, Grade 3, ER/PR positive, HER-2 negative. Bone only disease +Lytic lesion C7 vertebral body with disruption of the posterior wall +Metastases in T4 vertebral body and L4 spinous process without collapse or canal invasion
15/10/2014	+Tamoxifen	
05/11/2014	MRI - Cervical	Metastases re-demonstrated C7 & T4
11/12/2014	CT bone scan	Progression of metastatic disease with more prominent right third rib metastasis and new right 8th rib metastasis Bony metastatic disease stable
16/03/2015	Spinal Stabilisation surgery	
23/04/2015	Radiotherapy to C spine complete (C4-T4, 20Gy in 5 fractions since Spinal Stabilisation)	+C7 progressive disease with osseous destruction with potentially impending complete vertebral collapse and cord compression
25/05/2015	Nuclear Medicine Whole Body Scan	No other suspicious bony lesions reported
29/05/2015	DEXA Scan	Osteopenic reported
04/06/2015	Baseline CT scan -Tamoxifen (wasn't helping) +GnRH agonist – Zoladex +Aromatase Inhibitor (AI) – Arimidex	+Bone metastases; axillary and mediastinal lymphadenopathy
02/07/15	+bisphosphonate – Pamidronate (6 weekly)	Breast Mass smaller
29/07/2015	CT Scan	10% reduction in axillary and breast lesions
04/11/2015	CT Scan	Breast mass 5x3cm, Axillary mass 6x2cm
13/06/2016	CT Scan / Examination bisphosphonate – Pamidronate dose changed to 3 monthly	All lesions reduced in size – bidimensional response on serial imaging
Mar-17	CT Scan / Bone scan	“Showed excellent disease response” “(scan) did not demonstrate any evidence of metastatic bony disease”

## Follow-up and Outcomes

### Client-Assessed Outcomes

The client now reports that she is back to enjoying her normal daily activities. These include returning to her full-time job (as of September 2015), following her passion for gardening, and taking good care of an elderly family member. She also notes a general improvement in the energy levels she has in order to go about her life.

### Diagnostic Test Results

The client began her functional medicine therapy including a rigorous detox program (designed around a Bio-Regulatory Treatment strategy) before she was medically diagnosed. She was on the nutritional regime six months before her spinal surgery. She responded well and her blood markers began to change long before the surgery. Her recovery from the surgery was remarkable. Of particular note was that only eleven months after her diagnosis her breast lump had decreased in size by at least 10% in both the axillary and breast lesions. At the same time there was no evidence of new disease.

### Intervention Adherence and Tolerability

A key component of the protocol developed for the client was

educating her about how all parts of it fit together. Consequently, she demonstrated a very disciplined and systematic approach to the entire wellness plan. As the plan had been customized for the client, she had no trouble following any elements of it.

### Adverse and Unexpected Events

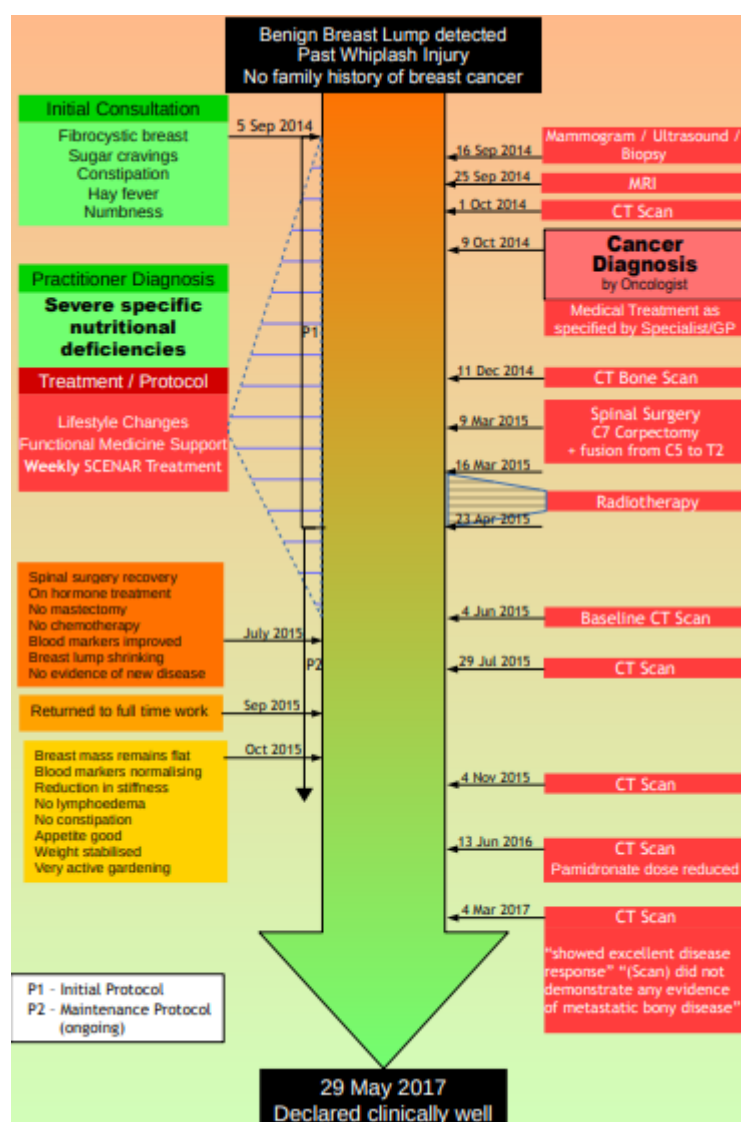
The client responded positively to the customized protocol without any adverse reactions.

## Discussion

Regular mammogram screenings in 2010 and 2012 were reported as clearly. The client was devastated that in 2014 when she was diagnosed with locally advanced ER positive, PR positive, HER2 negative node positive breast cancer, infiltrating ductal carcinoma grade 2. In September 2014, the client discovered a breast mass which was not sore and a large axillary mass whose size appeared to fluctuate. She did not feel any change in herself systematically, but her insulin was spiking. There is increasing evidence that hyperinsulinaemia can be associated with chronic diseases like cancer [9]. As such, elevated insulin can cause damage to every system, i.e., neuropsychiatric, gastrointestinal, endocrine, vesicular, circulatory, urological and even skeletal by way of chronic inflammation [10,11]. Care was taken by the practitioner to strictly address all of the elevated biomarkers indicated in Figure 2. As

each customized protocol was updated regularly, monitoring of the client revealed that the directions of the biomarkers had been reversed, there had been a significant reduction in breast mass

and an excellent disease response according to a CT scan report in March 2017 (Figure 1).

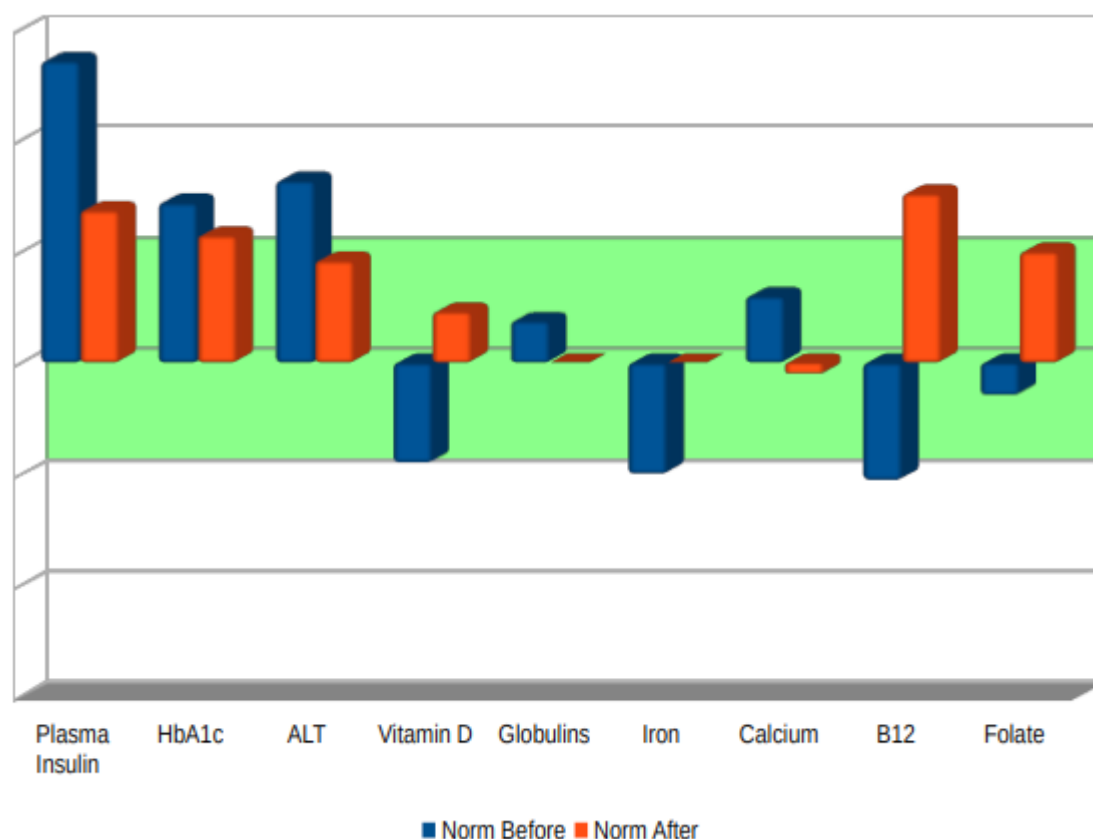


**Figure 1:** Results observed over time.

Where cancer is precisely described by Dvorak as "wounds that do not heal" [12], BrSM was included in the treatment plan to mitigate the underlying dysregulations that cancer cells could cause [13]. As soon as the biopsy, MRI and CT scans demonstrated a grade 2 infiltrating ductal carcinoma ER 95% positive, PR 95% positive, HER-2 negative, and guided by the laboratory testing, administration of the complementary therapies of BrSM and Functional medicine was begun. This was done with the full knowledge of the oncologist and continued alongside conventional

therapy (namely the hormonal and radiotherapy 20 GY in 5 fractions in the c spine area only). The sequence of events is clearly documented in the timeline (Table 1).

The metastatic disease progression was clinically monitored regularly through scans and blood markers. At each subsequent scan, a reduction in size of the breast lesion was demonstrated, no new disease was noted, and blood markers showed improvement as well (Figure 2).



**Figure 2:** Normalized changes in blood markers – Closer to the middle is better. Green region represents laboratory reference range for each marker.

In this case it is reassuring to know that complementary therapies presented no contraindication with cancer therapies. Employing complementary therapies alongside conventional ones, all focused on control and mitigation of the disease and its effects, has resulted in the best possible outcome for the client. Therefore, it is important that the principles and methodology of the intervention of CM are comprehensible to patients, healthcare professionals and conventional oncologists and that they are economically sustainable. Furthermore, as cancer is a systemic and multi-factorial disease and consequently can benefit from the synergistic use of multiple therapies, then perhaps CM is the way forward in the reduction of the side effects of conventional therapies and sustaining a better quality of life for cancer clients. The multidisciplinary approach is the route to be pursued, with the aim of always selecting the best therapy for each patient and implementing real “comprehensive cancer care.” In addition, utilizing multi-targeted therapies to reduce hyperactivity of the innate immune system [14], may be observed in this case.

## Conclusion

In summary, drawing upon years of research and experience, the clinic has developed a functional understanding of the mode of action of the BrSM system which, when combined with the conventional medical approach, has established a long-term

protocol for successful management of cancer. In this path towards integration, the exchange of knowledge and experience is necessary among the stake holders involved in the care of the patient to maximize the potential benefits of integrated medicine. From the beginning, the integrated approach was chosen, and the client responded safely and effectively. The client is enjoying her fifth year of remission from the point of diagnosis. Complementary Medicine (CM) has positively managed the disease control aspect and accelerated the client’s recovery to the extent that she was able to resume work and normal life within 12 months.

## Client Perspective

The client has told us that she feels like she has gone from a certain doom back to normal life. Currently she is thriving at home and actively pursuing her passion for gardening.

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## Conflict of Interest

No Conflict of Interest.



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