Academy of PHYSICAL MEDICINE

# Broadcast Summary

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# Breast Cancer
## With Liz Carson and Jan Backhouse

### About Liz Carson

- Founder of Carson Chiropractic and Sports Injury Clinic. Now non-practising, she continues to support the profession through her role as Chief Executive at the McTimoney Association.
- Played volleyball to international level - forced to retire due to knee surgery. Took up coaching where she encouraged her athletes to have regular chiropractic assessments to help prevent sports-related injuries and improve their athletic performance.
- Games Maker at the London 2012 Olympics supporting the Beach Volleyball teams and is a member of The Royal College of Chiropractors Sports Faculty.
- Published research "Chiropractic Care Amongst People with Multiple Sclerosis – A Survey of MS therapy Centres in the UK".

### About Jan Backhouse

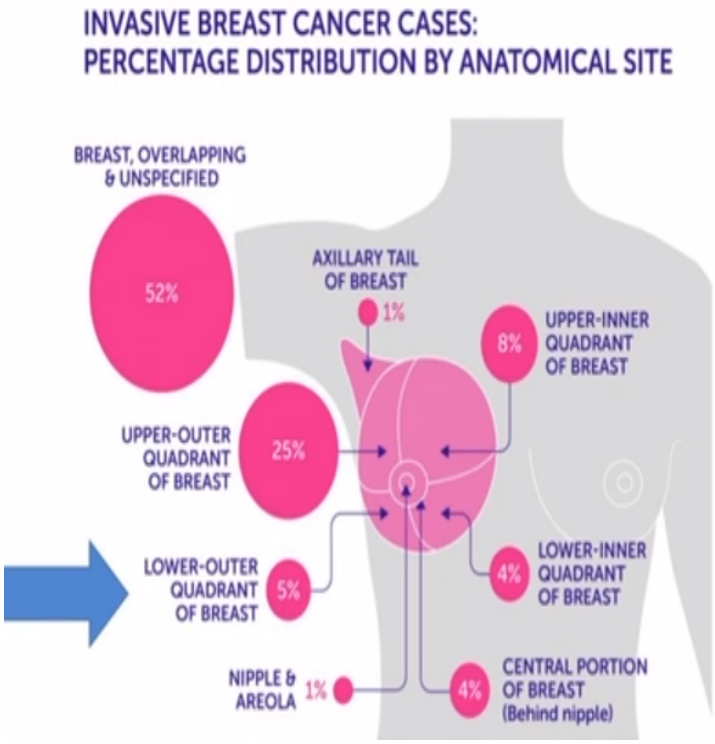
- Coordinator for "Bosom Friends", a support group for breast cancer patients and their family or carers.

## Breast cancer

- Breast cancer survival rates are up by 18% over the last 10 years.

- There is a big gap in terms of musculoskeletal care at the end of conventional treatment. Post-surgery, patients may be left with pain (generally upper quadrant - neck and shoulder), and impaired functionality (i.e. motor control).

- Chiropractors, osteopaths and other healthcare professionals are often nervous of treating, and believe they need permission from the NHS before they can help cancer survivors.




***Mammography vs. thermography***

- Mammography is for diagnosis and screening the breasts. The machines now are digital and much more comfortable – a little safer than they used to be. A mammogram is not always 100% reliable in detecting breast cancer. The "squish" during the mammogram is quite uncomfortable and can be painful especially for those who have already undergone several breast surgeries.

- Thermography is not a diagnostic tool. It is about noticing a change. The thermal pictures taken as a baseline are compared to those taken after to see if there are any changes i.e. tumour growth.

***Grade II invasive lobular cancer – oestrogen receptor positive***

- This is one of the more common subsets of breast cancer. The tumour has many oestrogen receptors on it and therefore the hormone therapy should be directed at reducing the amount of oestrogen which that tumour needs to feed.

- Premenopausal patients with ovaries that are producing little oestrogen are prescribed with Tamoxifen to cap those oestrogen receptors.

- Post-menopausal patients are prescribed with an aromatase inhibitor. The hormone therapy post-menopause is about reducing the amount of oestrogen that is left in the body.

***Examining the symptoms***

- The clinicians have a duty of care. If a patient has an ongoing health concern that the GP has dismissed as nothing serious, the clinician (who suspects that there is an underlying serious disease) should insist and persistently advise the patient to go back and get checked.

- Not all women are sufficiently familiar with their breasts to know when there is an unusual/unnatural lump. Regular breast self-check should be done. A practice nurse should be able to teach women how to properly examine their breasts to find a significant abnormality.

- Some women have very lumpy breasts specifically during their menstrual cycle. They should be able to know what normal breasts are for them.

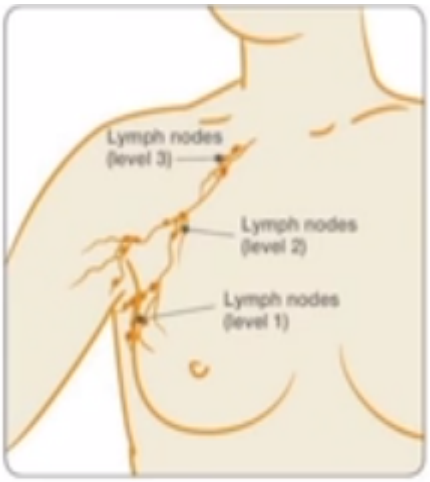
***Managing breast cancer***

- The lump can be palpated by a skilled clinician. An ultrasound-guided fine needle aspiration biopsy is used to locate the nodule/lump and to remove a tissue sample for examination.

- During MRI, gadolinium is injected into the patient to make the tumour stand out – to see its size, shape, and location.

- If the tumour is right against the chest wall, breast-conserving surgery is usually done rather than mastectomy.

- A two-year period after the diagnosis is enough time for any metastatic cancer to escalate.




Sentinel node biopsy is used to determine whether cancer has spread beyond a primary tumour into the lymphatic system. It involves injecting a tracer mineral that helps the surgeon locate the sentinel nodes during surgery.

The sentinel nodes are the first few lymph nodes into which a tumour drains. These are removed and analysed in a laboratory.

If the sentinel nodes are free of cancer, then the latter is unlikely to have spread. Removing additional lymph nodes is then unnecessary.

The oncology team can tell whether a patient has got metastases.

**Analogy:** If the egg yolk is the tumour, it will be removed during surgery along with some of that egg white so that what remains is a clear margin all the way around it which should be the only healthy tissue left.

***Post-surgery neuromusculoskeletal issues***

- Significant loss of shoulder ROM is common 2-3 months post-surgery (Gosselink and Reitman). The nature of restriction includes flexion and abduction.

- Loss of ROM is also reported 15 years after breast cancer surgery by 26% of women. ROM restriction is greater for patients who underwent breast cancer surgery and received radiation therapy.

- Around 25% of patients who have had breast cancer surgery will have persistent and prolonged pain (i.e. up to 3-4 months) when they come out.

- Ten years post-surgery, a large proportion of women will have some type of arm problem (i.e. sensory deficits, arm pain, function and range of motion problems).

- Around 60-80% of patients will have a sensory abnormality in the nerve distribution post-surgery and 25% of breast cancer patients will develop intercostobrachial neuralgia at some point.

- Around 60-70% of breast cancer patients will suffer cording or axillary web syndrome. The traction fascial osteopathic treatment is helpful in addressing it *(Maunsell et al, Can J Surg, 1993)*.

- A large portion of the upper limb and C-spine is going to be impacted by smaller procedures like lumpectomy and wide local excision.

- Radiotherapy often produces costochondritis (massive fatigue issue). It can also soften the ribs. Late-delayed myelopathy may also arise. Nerves in the arms and breast may be damaged.

- Hormone therapy and surgery give joint pain. Both radiotherapy and hormone therapy produce "chemo brain"[1] or cancer therapy-associated cognitive change due to taxanes (a component of chemotherapy) which produce neuropathies and instability issues in patients.

- Lymphedema can occur years after surgery. A lymphedema specialist can help with the treatment.

- Breast cancer patients also suffer numbness (i.e. nipples do not erect, motor control gone).

[1] "Chemo Brain" can occur in patients who did not have chemotherapy. It is possibly caused by the stress of diagnosis/surgery/treatment.

- Many post-breast cancer patients live with a lot of pain, discomfort, and lack of movement and they do not know where to go because clinicians/manual practitioners don't know if they're allowed to treat, are concerned they might interfere with a treatment plan that is ongoing, or worry that they will exacerbate any metastasis.

- Patients who had a latissimus dorsi flap reconstruction will have shoulder biomechanics massively impacted. Physical therapy is very important.

- Physical therapy would not cause cancer spreading. Patients may be given permission to start manual therapy right away after surgery.

- Other patients undergo pre-surgery rehab so that they have a good range of motion. This is akin to athletes who get their quads up before they go in for an arthroscopy.

- Discontinuation of driving during treatment is a relatively common occurrence. Loss of cervical range of motion makes driving uncomfortable and unsafe. 2 RCTs demonstrated that progressive shoulder resistance training combined with C Spine & shoulder range-of-motion exercises and stretching was more effective than "standard physiotherapy." (Carvalho, AP, Vital, FM, Soares, BG. Exercise interventions for shoulder dysfunction in patients treated for head and neck cancer. *Cochrane Database Syst Rev*. 2012; **4**: CD008693)

***Psycho-emotional issues***

- The stress of the diagnosis, surgery and treatment programme and the continued thought that cancer will recur may be the true cause of "chemo brain".

- Patients who received hormone therapy, chemotherapy, and radiotherapy that gives cognitive change will have difficulty in executive functions and short-term memory recall.

- One in five individuals who have had breast cancer will be diagnosed with PTSD. These individuals will also have difficulty with reasoning and processing.

***Recommendations***

- Being diagnosed with cancer produces traumatic stress in patients. Patients should always take someone with them to appointments, to take down notes and seek answers to questions/concerns about the disease for them. They'll find it hard to think straight themselves.

- Diet: hard to find valid evidence. It is recommended that patients should speak to nutrition experts about what is best for them. There is conflicting information about drinking cow's

milk (dairy cows are boosted with oestrogen which is a significant factor in some tumour growth).

- Access local breast cancer care support groups, lymphedema associations, and so on. The Breast Cancer Care website answers questions about the disease in layman's terms. They can also allocate somebody who has been through the exact same post-surgery process.

- The Bra Group helps patients with breast reconstruction – the surgeon explains the reconstruction options available and what happens, including post-operative problems they may have.

- Cancer patients should be conditioned at the outset that they will be hearing a lot of differing opinions from people about what has been the cause of their cancer. They should be assured that those are generally untrue.

- Patients should keep in touch with other patients to learn about their experiences.