COMPREHENSIVE BREAST CANCER INSTITUTE

Metro North Primary Care Breast Health Newsletter – June 2023

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As the RBWH Centre of Breast Health GP with Special Interest (GPwSI), I am passionate about improving communication and education between primary and tertiary care. Therefore, I have decided to start a regular newsletter that can provide some up to date, evidence based primary care education in breast medicine, as well as highlighting some of the world leading breast cancer treatment that is being conducted at the RBWH.

Each quarter I will write an article on a topic such as breast pain, breast density, risk assessment tools, high risk screening, genetic referral, menopause hormone therapy and breast cancer risk, management of genitourinary symptoms in the setting of breast cancer, survivorship care, supplemental MRI screening and changes to MBS rebates etc. The first topic is a common presentation to my clinic (10% of presentations), breast pain.

The RBWH Breast and Endocrine Surgery Team

GP EDUCATION EVENT

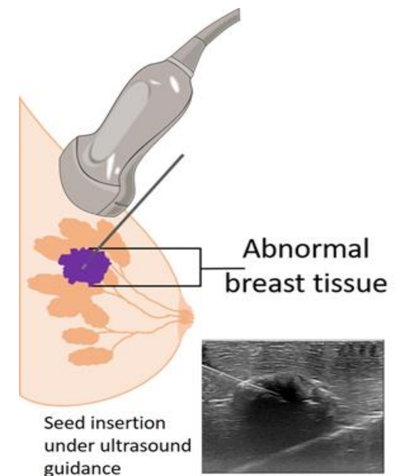
We are busy planning a half day GP education event in breast medicine in October to coincide with Breast Cancer Awareness month.

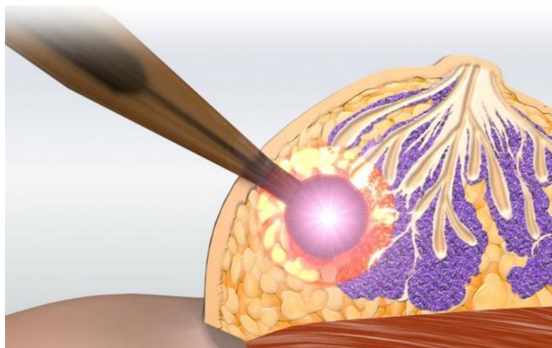
Further details to come!

TRANSLATING RESEARCH INTO CLINICAL PRACTICE

ROLLIS (Radio-guided Occult Lesion Localisation using Iodine-125 Seeds) for breast cancer

In a Brisbane first, RBWH is using a new localization technique, using tiny radioactive seeds. The technology is superior to hookwire localization thereby reducing the need for further surgery as well as improving patient comfort, reducing anxiety and pain. The seeds can be inserted a week or so prior to surgery and therefore allow for improved workflow and avoids hookwire associated delays.



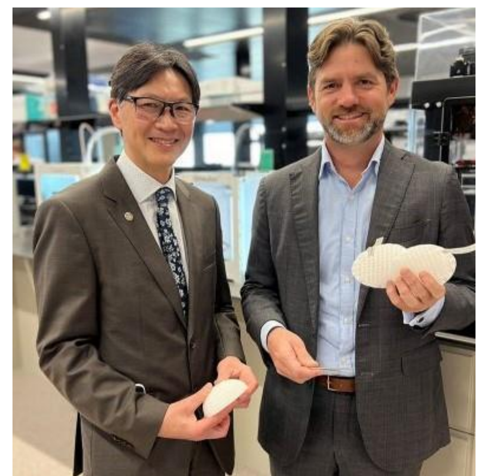


IORT – Intraoperative Radiotherapy

In a Queensland first, women with small, good prognosis tumors undergoing breast conserving surgery may be invited to have single dose targeted intraoperative radiotherapy (<30 mins). These women are then able to avoid the standard daily radiotherapy for weeks.

Breast Reconstruction using 3D engineered biodegradable scaffolds

RBWH surgeons recently carried out the world's first breast implant surgery using a 3D printed scaffold. The aim of this world first phase 1 clinical trial is to provide a safer alternative to permanent silicone implants. The scaffold is made from the same group of medical grade biomaterials used in dissolvable sutures. This provides the scaffold for the patient's own tissue growing around it and forming new breast tissue over time. The scaffold is completely replaced by the patient's tissue over 3-4 years. To date, 9 patients have undertaken this surgery. The team is heading towards a multi-centre phase 2 study with RBWH being the lead investigator reference site.



BREAST PAIN (MASTALGIA)

Breast pain is very common with 70% of women experiencing it in their lifetime. It is usually mild and resolves but may recur. Although women with mastalgia worry that it is a sign of breast cancer, it is a rare symptom of breast cancer. A study in the UK found that of the 177 women referred to a specialist unit with breast pain only, none had breast cancer. (1) A US study found women with breast pain were less likely to be diagnosed with breast cancer than women who did not complain of breast pain, regardless of age and other breast cancer risk factors. (2) Another study found that it was more common for patients to have incidental, contralateral asymptomatic cancer than it was for patients with pain alone to have underlying ipsilateral cancer. (3)

Breast pain can be classified as:

- Cyclical (2/3) – associated with hormonal fluctuations of the menstrual cycle, usually in the week prior and relieved when the period begins. This tends to be bilateral and often greater in the upper, outer quadrants of the breasts. It can be associated with hormonal medications such as the oral contraceptive pill and hormone replacement therapy. (4, 5, 6)
- Non-cyclical (1/3) - does not follow a menstrual pattern, more likely to be unilateral and variable location. May be associated with large breasts, HRT, breast cysts (drainage of large cysts may relieve the pain), duct ectasia, mastitis, pregnancy and trauma. (4, 5, 6)
- Extra-mammary – this is not true mastalgia and related to chest wall pain such as pectoralis major strain, costochondritis, arthritis, spinal and paraspinal disorders.

Examination

The clinical examination is focussed on detecting any signs of malignancy and ruling out differential diagnoses such as mastitis, extramammary pain etc. It is important to assess the breasts, axillae, supraclavicular and infraclavicular areas for skin changes, nipple changes, nipple discharge, enlarged/tender lymph nodes, breast masses, identify local areas of tenderness and for chest wall tenderness.

Investigation

Depends on age and presentation and examination findings. Mammography and/or ultrasound may be helpful, and a negative result often can alleviate anxiety. A study published in 2020 found that of the 436 new cancers diagnosed over the course of 12 months, the 12 cancers presenting with pain were correctly identified on mammography, including 4 cancers in the symptomatic breast and 8 incidental cancers in the contralateral, non-symptomatic breast. (3)

Treatment

If there are normal findings on history, clinical examination and imaging then reassurance is often all that is required (75-85%) of women. The majority of women can be managed appropriately by their GP with reassurance, simple strategies and review.

First line treatment:

- Well fitting bra – with one study finding significant improvement in breast pain with half of patients having a significant reduction in pain and a quarter of patients having complete resolution in symptoms. (7)
- Warm or cool compresses
- Over the counter medications: paracetamol, ibuprofen/diclofenac as needed. Topical diclofenac was found to reduce pain in both cyclical and non-cyclical breast pain with minimal side effects. (8, 9). The addition of topical NSAIDS provides relief in 70-92% of women. (10).
- Evening Primrose Oil 1000mg 3 times a day for 2-3 months may be considered however multiple studies suggest it is likely no more effective than placebo. Many practitioners still recommend its use given it is well tolerated and may relieve pain in some patients. (11, 12,10)
- Consider reducing or stopping HRT/OCP after discussion with the patient
- Lifestyle: reduce caffeine, exercise and a low fat diet have all been effective in some observational studies and small randomised trials although there is no clear evidence of benefit.
- No evidence of benefit in RCT for vitamin E and therefore no longer recommended.

Second line:

Referral for consideration of medical management may be appropriate if there is ongoing significant pain that is negatively impacting her quality of life, particularly if this persists for more than 6 months. A meta-analyses on drug treatments compared the most commonly used prescription medications for mastalgia - Tamoxifen, Danazole and Bromocriptine. Tamoxifen has the best evidence for benefit with fewest side effects. It is effective at both 20mg daily and 10mg daily, with side effects are significantly reduced at the lower dose. (8). It is associated with a 94% improvement in cyclical pain and a 56% improvement in non-cyclical pain. Tamoxifen is associated with menopause like symptoms including hot flushes, vaginal dryness, joint pain and leg cramps. It also increases the risk of blood clots, stroke and uterine cancer. Therefore although it is effective, given the benign nature of mastalgia, tamoxifen is infrequently used. Non-GP specialist input is recommended if considering commencing these medications.

The current Healthpathways for mastalgia are being reviewed and a future newsletter will provide a link to this, once completed.

When seeing a woman with breast pain, it also provides an opportunity for breast cancer risk assessment and those women at moderate to high risk of breast cancer may benefit from tailored breast cancer screening or referral to high risk breast cancer clinic and/or genetics referral.

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