Breast Cancer case study workshop

The Royal Marsden GP Education Programme

15 March 2013
Breast cancer case study

Presented by
Fiona MacNeill - Consultant breast surgeon

Panel
Fiona MacNeill - Consultant breast surgeon
Ms Nikki Snuggs - Senior nurse specialist
Dr Afsana Safa - Associate GP, Cancer commissioning Team, South & West London
Part one - Initial presentation

Case ONE
- 75yrs widow
- 6 month history of RIGHT nipple inversion and possible LIB.
- Flat affect, very apologetic, infrequent attender

Case TWO
- 39yrs BBC documentary producer.
- 2 day history lump in LEFT breast, noticed when showering.
- Very agitated. Best friend diagnosed with BC a month ago
- Demands immediate referral to specialist unit
Please re-join your groups to discuss at 11:40am

Groups 1&2 - stay here (Julian Bloom Lecture Theatre)
Groups 3&4 - Kay Room, 4th Floor
Groups 5&6 - Refreshments area, ground floor
Refreshments until 11:40am
Part one - Initial presentation

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- Very agitated. Best friend diagnosed with BC a month ago
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Q1. What additional information would you require?

Case ONE and TWO

• Other breast related symptoms (EG: pain, nipple discharge etc)
• Endocrine history (menarche, LMP, parity etc, exogenous oestrogen used - OCP and HRT)
• Family history - first and second degree relatives, genetic testing, Eastern European/Ashkenazi heritage?
• Any previous breast problems/imaging? Dates
• Past medical and relevant social history
Q2. What examination would you perform?

Case ONE and TWO

LOOK
- Breast symmetry and chest wall
- Elevate arms to look for dimpling etc

FEEL
- both breasts and local nodal basins (axilla and neck)
- Identify location in relation to nipple (think clock face)
- Fixation to deep/superficial structures
- Nodal status
- General examination if required

MOVE
- Nipple compression ONLY if indicated - not routine
Part one - Initial history

Case ONE
- 75yrs widow, 3 supportive daughters. Lives independently.
- 6 month history of RIGHT nipple inversion and possible LIB.
- HRT for 20yrs.
- Last mammogram NHSBSP North London 1 year ago - NAD

Case TWO
- 2 day history tender LEFT LIB, noticed when showering.
- Mother, maternal aunt and grandmother had breast cancer.
- Non-smoker, BMI 30, 25u ETOH week. LMP 2 weeks ago.
Case ONE
Retracted nipple
Diffuse lumpiness ?LIB
Outer lower quadrant

Case TWO
4cm lump
upper outer quadrant
2 o’clock, 2cm from nipple
Q3: What is the likely diagnosis?

Case One - 75yrs
a. Breast cancer
b. Breast cyst
c. Fibroadenoma
d. HRT related benign breast changes

Case Two - 39 yrs
a. Breast cancer
b. Breast cyst
c. Fibroadenoma
d. IVF benign breast changes
Breast Lumps and likely diagnosis: Age related

- Very low risk of cancer
- Menopause
Q4: What would you do next?

Case One 75yrs
a. Reassure and discharge
b. Offer review in 2/4/6/8 weeks
c. Stop HRT and review
d. Refer to RMH rapid diagnostic unit

Case Two 39 yrs
a. Reassure and discharge
b. Offer review in 2/4/6/8 weeks
c. Prescribe antibiotics
d. Refer to RMH rapid diagnostic unit
The Royal Marsden Rapid Diagnostic & Assessment Centre (RDAC)

8000 new RDAC referrals per week
- 8 RDAC clinics per week

- High quality streamlined breast assessment
  - Consultant led - radiologists, surgeons and pathologists
  - ‘One-stop shop’ - average 2-3 hours assessment

- Excellent overall experience - patient surveys
- Meet the targets, Sustainable

The majority (90%) of patients will be discharged at their first visit reassured they have healthy breasts
Triple assessment

- Clinical examination
- Imaging
  - <40yrs ultrasound
  - >40yrs Mammogram +/-ultrasound
- Pathology – usually ultrasound guided
  - Cytology – FNAC
  - Core biopsy more commonly used today

Other diagnostic tests such as MRI are available if required
**THE DIAGNOSTIC GRID**

**Case ONE: Non concordance**

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- **Suspicious**
  - Clinical Opinion: 4
  - Mammogram: 4
  - FNAC: 4

- **Normal very dense**
  - Ultrasound: 3

- **Uncertain**
  - Core Biopsy: 3

- **Insufficient cells**
  - FNAC: 1
### THE DIAGNOSTIC GRID

#### Case ONE: Non concordance

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- **Suspicious**: 4
- **Uncertain**: 3
- **Insufficient cells**: 3
- **Normal very dense**: 3
## THE DIAGNOSTIC GRID: Case TWO: cancer

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Part two - Return to GP surgery

Case ONE - you have not received a fax
She returns to your surgery alone. Has been told the diagnosis is uncertain but suspicious for lobular cancer - the core biopsy results will be back next week. Has not told her daughters. She has the Breast care nurses card and number. She asks you what to do about HRT. She does not want to go back next week as her ‘time has come’

Case TWO - you have received a fax with a BC diagnosis
She has been told she has invasive ductal breast cancer that may have spread to the LN’s. The full pathology results will be ready next week. She has another cycle of IVF booked in 4 weeks time and is adamant this must continue at any cost. She tells you she will not have chemotherapy as it might make her infertile.
Q1. What histological cell type is most commonly seen in the breast?

**Invasive**
- Ductal 80%
- Lobular 20%

Cancer cell receptor expression is very important
- ER/PR
- HER 2
- Others (research)

**Pre-invasive**
- DCIS (LCIS)
- Cancer cell receptor expression is not understood
Q2. How commonly do breast cancers metastasise (e.g. lungs, liver)?

Depends on stage (1-4) at diagnosis

Stage 1: confined to the breast
Stage 2: Breast and axilla
Stage 3: Breast axilla and neck
Stage 4: Systemic

30% BC are screen detected stage one

Average 5 year survival is 80%
Q3. Is this likely to be a ‘curable’ cancer?

Case ONE – 75yrs
– If her cancer is left untreated she will die of BC in the next 5-8yrs
– For a fit and healthy 75yr actuarial life expectancy is another 20yrs.
– She is more likely to die of other as yet undiagnosed future co-morbidities than her early stage one breast cancer.

Case TWO – 39yrs
– Her future is less certain. She has stage two disease and in view of her young age is more likely to die of her BC. We need more accurate staging information
– Does she want to risk bringing a child into the world?
Q4. Both patients ask if their children/family are at increased risk of BC?

**Case ONE – 75yrs**
There is no other family history of breast, ovary, prostate or bowel cancer in the maternal or paternal so her daughters are at average population risk (10-12% lifetime risk)

**Case TWO – 39yrs**
She has a mother, maternal aunt and grandmother who had breast cancer and cousin with ‘stomach’ cancer
She has eastern European heritage as is her husband whose mother also died of BC
She may be a BRCA carrier.
This means her children have a 50% chance of inheriting her BRCA genes. She requires genetic risk assessment and testing
Q5: How would you manage the HRT and IVF issues

- Both are exogenous oestrogens and so could potentially drive the cancer.
- Oestrogen is contraindicated for ER positive breast cancer

HRT
- Await the receptor results and then decide. For example can wean off the HRT over the next few months

Fertility
- Consider surgery then egg harvest
Q6. What advice would you give in terms of possible treatment options available?

The success of BC treatment depends on use of multiple therapies in sequence

Local therapy: Surgery and Radiotherapy

Systemic therapy: Chemo, Herceptin, Endocrine

The skill of the breast MDT is individualising the use of these treatments and in what sequence
Part three - Management in primary care

Case ONE – 75yrs
She has decided to have treatment and returns asking for your help to stop her HRT
She continues to express negative thoughts and remains very flat

Case TWO – 39yrs
She has decided to have chemotherapy first and is awaiting an urgent gene test. Her twin sister is refusing to speak to her....
She/partner are devastated at the prospect of not having children......
The women ask ‘why go to The Royal Marsden’ – the local hospital is just a bus ride away and has an excellent reputation?

- RMH is a specialist cancer hospital with a complete range of treatments and facilities on one site
- Treat over 1200 new cancers per annum from London, UK and abroad

- Strong MDT of highly specialised breast specific oncoplastic surgeons, oncologists, radiologists, pathologists and specialist nurses
- Highly scored on recent peer review (over 96%) and above average for the NHS patient cancer survey
- Reconstruction rate 43% (UK average 17%)
Part three - Management in primary care
Post surgery and chemotherapy

Case ONE – 75yrs
She returns 7 days after mastectomy and SLNB. Her chest wall is very swollen and hot......
She has pain down the inner aspect of her arm

Q1. what is the diagnosis and how would you manage the situation?
Part three - Management in primary care - during chemotherapy

Case TWO - 39yrs

- She returns 10 days after her first injection of chemotherapy. She feels dreadful but looks OK and observations are all normal except her temperature is 37.8°C. She has a slight cough......she faints in the surgery....

Q2. what is the diagnosis and how would you manage the situation?
Part three - Management in primary care - treatment induced menopause

Case ONE – 75yrs
She returns 6months after mastectomy and SLNB. She is now taking Letrozole (aromatase inhibitor) and has small joint pain, uncontrolled hot flushes, is not sleeping and is exhausted. Her Q of L is poor: she wants to stop her endocrine treatment........

Case TWO – 39yrs
She returns having completed her primary chemo. She carries the BRCA 2 gene and is going to have bilateral RRM and oopherectomy. She has small joint pain, uncontrolled hot flushes, is not sleeping and is exhausted, cognition has declined and she cannot work. Her Q of L is poor.
Q3. How would you manage the menopausal symptoms?
Part three - Management in primary care

Case TWO – 41yrs
Two years later she returns with severe pain in her lower spine. She has a past history of disc prolapse and is taking Tramadol with no relief.

Q4. What is the differential diagnosis?

Q5. What would you do?
Q6. What treatments options are available to a patient with recurrent breast cancer?

Secondary disease is not curable but can be contained and controlled for up to 10-12yrs with modern therapies. The average life expectancy for visceral disease is 9-12 months.

Further surgery and RT

Further Chemotherapy

Switch Endocrine agents
Revision

1. Risk factors - Age and genetic status. Exogenous E2

2. Signs and symptoms - variable - any breast change requires referral especially over 50yrs

3. Investigations - triple assessment, staging

4. Overview of treatment - multimodality including primary care

5. Management - diagnostic and treatment related complications. Complex decision making
Any questions?
Evaluation

Breast cancer case study
Please rate this session for relevance to you as a GP:

1. Poor
2. Fair
3. Good
4. Very good
5. Excellent