Breast infections: non-lactating women

We commonly see breast infections in lactating women which can be distressing and debilitating and can interfere with early breast-feeding and bonding. The aetiology is different in non-lactating women and we need to consider whether further investigation is warranted.

The authors of this review article highlight the importance of early appropriate antibiotics and avoiding delays in referral for surgical management if oral antibiotic therapy is failing as delay can result in loss of breast tissue and asymmetry (BMJ 2011;342:d396).

Please see the separate article about breast feeding problems in the pregnancy chapter for the management of breast infections in lactating women.

Statistics and epidemiology

- In non-lactating women, diabetes, immunosuppression and smoking are risk factors, as are recurrent sebaceous cysts and hidradenitis suppurativa.
- Staphylococcus aureus and Staphylococcus epidermidis are most common organisms in lactating women, enterococci and anaerobes are also seen in non-lactating women.

Presentation

In non-lactating women a diverse group of infections are seen with different aetiology. They are categorised into three groups:

Central/sub-areolar infections:

90% of cases will be seen in smokers and can be seen in men. This is due to damage to subareolar ducts which can then become infected.

- Inflammation around areolar +/- lump, nipple retraction and discharge.
- May also be associated with nipple piercing.
- Anaerobic bacteria are common.

Peripheral non-lactating infections:

- Presentation is similar to mastitis – infection tends to be in a localized segment but may spread to an entire quadrant
- Less common in non-lactating women but is associated with diabetes, rheumatoid arthritis, steroid treatment, breast trauma and granulomatous disease.
- Occasionally associated with carcinoma in situ.

Patients aged >35y with peripheral infection and no obvious cause should be investigated once infection has resolved.

Skin infections:

- Sebaceous cysts and superficial cellulitis are both common.
- Obesity, large breasts, breast surgery and radiotherapy are risk factors.
- Tends to occur on lower half of breasts where sweat accumulates.

Management

A more recent article in the BMJ 10 minute consultation series updates management and gives us some points to differentiate inflammatory breast cancer from mastitis or breast abscess (BMJ 2016;353:i2646).

The authors recommend:

- Urgent hospital admission via on call surgical services if any of: hemodynamic compromise, systemic symptoms (fever, tachycardia or rigors), rapidly progressing infection or immunocompromised.
- Breast abscess (painful swollen fluctuant lump with overlying skin changes) - urgent referral to breast services to be seen within 24h.
- Mastitis (tender, red, swollen hard area of the breast, usually in wedge shape) oral co-amoxiclav 500/125mg three times a day for 10-14d. For patients with a penicillin allergy, clarithromycin or erythromycin with metronidazole can be used as an alternative. Analgesia and warm compress to alleviate tenderness. Advise follow up if symptoms do not resolve within 48h.
  The authors do not specifically address non-lactating women with superficial breast skin infections – flucloxacillin would seem a reasonable first-line antibiotic for this group.
- Suspicion of breast cancer - refer via 2ww pathway.
## Differentiating inflammatory breast cancer from mastitis.

<table>
<thead>
<tr>
<th></th>
<th>Inflammatory breast cancer</th>
<th>Masitis</th>
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<tbody>
<tr>
<td><strong>Epidemiology/aetiology</strong></td>
<td>Rare (1-6% of breast cancers). Risk factors: age, family history, immunocompromise</td>
<td>Common. Risk factors: age, breast feeding, smoking</td>
</tr>
<tr>
<td><strong>History</strong></td>
<td>Breast globally enlarging at rapid rate. No fever.</td>
<td>Breast does not usually enlarge. Fever.</td>
</tr>
<tr>
<td><strong>Examination</strong></td>
<td>Erythema of entire breast (pink-red). Generalised oedema or peau d’orange. Axillary lymphadenopathy may be present</td>
<td>Erythema affects a localised area within the breast. Oedema or peau d’orange usually affects a well demarcated area of the breast. Axillary lymphadenopathy unlikely</td>
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</table>

### Breast infections
- The aetiology of breast infections and abscesses is different in lactating and non-lactating women.
- Prescribe antibiotics early to reduce risk of breast abscess formation and speed recovery.
- Choose antibiotics to cover anaerobic bacteria.
- For non-lactating women with a breast abscess, refer to be seen within 24h by breast services.
- For non-lactating women >35y with unexplained peripheral infection refer for investigation to exclude ductal carcinoma *in situ*.

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We make every effort to ensure the information in these pages is accurate and correct at the date of publication, but it is of necessity of a brief and general nature, and this should not replace your own good clinical judgement, or be regarded as a substitute for taking professional advice in appropriate circumstances. In particular check drug doses, side effects and interactions with the British National Formulary. Save insofar as any such liability cannot be excluded at law, we do not accept any liability for loss of any type caused by reliance on the information in these pages.

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*October 2016*
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All our courses are:

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Developed and presented by practising GPs and immediately relevant to clinical practice.

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- 6 CPD credits in a lecture-based format, with plenty of time for interaction, humour and video clips, to keep you focussed and awake.
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- 12 months subscription to [www.gpcpd.com](http://www.gpcpd.com). With three times the content of the handbook, it allows you to capture CPD credits as you read on the site and use it in consultations! It also comes with Focused Learning Activities - Online learning activities to provide evidence for your appraisal and earn hundreds further hours of CPD credits.
- Buffet lunch and refreshments throughout the day!

What’s not included? Our courses contain NO theorists, NO gurus, NO sponsors, NO reps on the day! Just real-life GPs who will be back at the coal face as soon as the course has finished.

[www.gp-update.co.uk](http://www.gp-update.co.uk)
The GP Update Course – our flagship course!

With the amount of evidence and literature inundating us, it can be hard to know which bits should change our practice, and how. Our GP presenters summarise and discuss the results of the most important new evidence and guidance, concentrating on what it means to you and your patients in the consulting room tomorrow.

### 2016

<table>
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### 2017

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### The Women’s Health Update Course

This one-day update is a comprehensive guide to understanding and managing common gynaecological problems in general practice. You will meet “the Fallopians”, a fictitious family with more gynaecological complaints than you can shake a speculum at. Using a case-based approach will give you the skills to manage your female patients in a real surgery.

We aim to make the day fun, interactive as well as educational. You will leave the course feeling more confident, knowledgeable and with a much stronger pelvic floor!!! The day is designed for all GPs and GP STs – not just those with a special interest!

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### The Cancer Update Course

Within the next 15 years the need for cancer care will double and you will look after as many cancer survivors as diabetics.

Shared care follow up will become the norm, secondary care will pass responsibility to us.

A key 2015 Lancet Oncology commission paper warned that: “GPs are inadequately trained and resourced to manage the growing demand for cancer care in high income countries”.

Education for GPs was one of their five key recommendations – we can help!

The Cancer Update Course covers many more topics in much more depth than our GP Update Course. It offers you time to reflect and put your cancer learning into practice.

Cancer care is changing – get ahead with the Red Whale Cancer Update Course.

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OUR UPCOMING COURSES

Lead. Manage. Thrive! – The NEW management skills course for GPs.

Sometimes it feels like the thriving GP is an endangered species – demands on limited time and resources have never been higher. Our practices run in ever more complex ways and our teams extend beyond the practice walls. Often we get that instinctive feeling that there must be a better way to do things, but creating the space to make it happen can be difficult.

As usual Red Whale has done all the legwork to bring you a concise, practical and actionable one day course and handbook. Not only have we trawled through lots of relevant management, leadership and development literature, but we have also distilled its content through the lens of real GPs, enabling you to apply it to the reality of your practice.

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Bristol Fri 25 Nov
Cambridge Sat 26 Nov

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With the increased importance of telephone consultations this course aims to deliver practical skills which can be put to use immediately. The telephone is being used more and more by nurses as well as doctors in primary care, for triage, consultation and follow-up; in the daytime as well as out of hours. Our goal is to help you overcome difficulties and leave you with concrete ideas to enhance your own telephone contacts with patients.

London Thu 6 Oct
Manchester Thu 13 Oct

The Effective Consultation Course

The course focuses on behaviours which enhance effective use of time in the consultation. Efficient consultations reduce clinical risk and lower the risk of complaints and lawsuits. The course uses the rich evidence base on which consultation behaviours enhance effectiveness and how to go about learning them. We focus on actions, and you will leave with many practical tips to use in your consulting room the following day.

Leeds Wed 5 Oct
London Fri 25 Nov

Our Consultation Skills Courses

One-day small group courses designed for GPs, GP STs and General Practice Nurses.

The courses have a practical focus and lots of engaging exercises allowing delegates to rehearse the most effective consultation behaviours. But don’t worry, there won’t be any role playing in front of everybody!

Leeds Fri 18 Nov
Birmingham Sat 19 Nov
Bristol Fri 25 Nov
Cambridge Sat 26 Nov

Prices

GP Update Course:
GP £195 | GP Registrar £150 | Nurse £150

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£225 or £210 for members of www.gpcpd.com

(GPCPD members, please log in and then click on the relevant button within the 'Member information' box on the right of the home screen to get your discount code)

If you would like to discuss running an In-House Course with Red Whale please contact us: Tel: 0118 960 7077 or email: info@gp-update.co.uk

Did you know that all of our courses can also be run ‘in-house’ for CCGs, Clinical Groups and STs groups?

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• 100% unbiased content and 0% Pharma company sponsorship.

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- all the latest clinical updates, plus practice nurse specific topics too
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- improved confidence to support a wider range of patients
- robust clinical competencies, giving you confidence in their ability to support you in the day-to-day pressures of general practice.

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- [ ] The Women’s Health Update Course ............................................................. (location)............................................................. (date)..........................
- [ ] The Cancer Update Course ............................................................. (location)............................................................. (date)..........................
- [ ] Lead. Manage. Thrive! ............................................................. (location)............................................................. (date)..........................
- [ ] The Telephone Consultation Course ............................................................. (location)............................................................. (date)..........................
- [ ] The Effective Consultation Course ............................................................. (location)............................................................. (date)..........................
- [ ] The GPN (Nurse) Update Course ............................................................. (location)............................................................. (date)..........................

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- [ ] Women’s Health Update Handbook £70
- [ ] Cancer Update Handbook £70

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Price as stated in the flyer for each course. If applicable, please provide your discount code here.................................................

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