Management of Ovarian Masses in Premenopausal Women
Care Pathway and Referral Criteria

Purpose and scope
This guideline has been produced to provide information, based on clinical evidence, to assist clinicians with the initial assessment and appropriate management of suspected ovarian masses in the premenopausal woman.

It aims to clarify when ovarian masses can be managed conservatively by GPs in primary care settings, and when referral to secondary care is advisable for suspected malignancy (to the Gynaecology Oncology service at the Cancer Centre, Churchill Hospital) and for benign conditions (to the General Gynaecology service at the Women’s Centre, John Radcliffe Hospital).

Background and introduction
Up to 10% of women will have some form of surgery during their lifetime for an ovarian mass, but almost all ovarian masses in premenopausal women are benign. In fact, only approximately 1:1000 symptomatic ovarian masses in premenopausal women are malignant; the figure rises to 3:1000 at the age of 50.

Differentiating preoperatively between a benign and a malignant ovarian mass in a premenopausal woman can be problematic as radiological and serum markers are relatively insensitive.

The underlying management rationale is to minimise patient morbidity by:
- conservative management where possible
- use of laparoscopic techniques where appropriate, thus avoiding laparotomy where possible
- referral to the Gynaecology Oncology service where appropriate.

Change Control

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### Ovarian Masses in Premenopausal Women – Primary Care Management Guidelines

#### DIAGNOSIS

- A thorough medical history should be taken, paying specific attention to risk factors for ovarian malignancy (Appendix 1).
- Symptoms suggestive of endometriosis (Appendix 2) should be considered along with any symptoms suggestive of ovarian malignancy (Appendix 3).
- A physical examination should include abdominal and vaginal examination.
- A pelvic ultrasound should be performed to evaluate the ovarian mass.
- There is no need routinely to measure the serum CA:125 level.
- **However, in women <40 years’ old with a complex ovarian mass**, CA-125 should be measured, as well as lactate dehydrogenase (LDH), alpha-fetoprotein (α-FP) and human chorionic gonadotropin (hCG) because of the possibility of germ cell tumours.

#### MANAGEMENT

- **Simple cysts** (Appendix 4)
  - Women with <5 cm simple ovarian cysts generally do not require follow-up as these cysts are very likely to be physiological and almost always resolve within 2-3 menstrual cycles.
  - Asymptomatic women with 5-7 cm simple ovarian cysts should be rescanned in 6-8 weeks. If the cyst persists, referral to the Women’s Centre (General Gynaecology service) should be considered. (Appendix 4)
  - Women with >7 cm simple ovarian cysts should be referred to the Women’s Centre (General Gynaecology service).

- **Complex cysts** (Appendix 5)
  - *Haemorrhagic cyst* – rescan in 6-8 weeks and, if not resolved, consider referral to the Women’s Centre (General Gynaecology service) as likely to be an endometrioma.
  - *Endometrioma* – refer to the Women’s Centre (General Gynaecology service).
  - *Dermoid cyst* – refer to the Women’s Centre (General Gynaecology service).
  - *Complex cyst / solid tumour* suspicious for malignancy – **2 week wait REFERRAL to Cancer Centre (Gynaecological Oncology service)**
  - Serum CA-125 level should be measured. (plus LDH, α-FP and hCG if patient <40 years’ old)

#### REFER

**REFERRAL to Secondary Care**

- Acute presentation with pain – urgent referral to emergency gynaec clinic or A&E
- 5-7 cm simple ovarian cyst that persists after 2 scans or simple cyst >7 cm (Appendix 4)
- Complex cysts – as per Appendix 5
Appendix 1

Risk factors for ovarian malignancy

- Age (three-fold increase in perimenopausal women aged 45-50)
- Personal history of breast cancer
- Family history of breast or ovarian cancer (1st degree relative)
- BRCA1 or BRCA2 gene carrier
- Lynch syndrome, or hereditary nonpolyposis colorectal cancer (HNPCC), is an autosomal dominant genetic predisposition to colon cancer, as well as other malignancies including endometrial and ovarian cancer.

Appendix 2

Symptoms suggestive of endometriosis

- severe dysmenorrhoea
- deep dyspareunia
- chronic pelvic pain
- ovulation pain
- cyclical or perimenstrual symptoms, such as bowel or bladder, with or without abnormal bleeding or pain
- infertility
- dyschezia (pain on defaecation).
Appendix 3

Symptoms suggestive of ovarian malignancy

- Persistent abdominal distension (women often refer to this as ‘bloating’)
- Feeling full (early satiety) and/or loss of appetite
- Pelvic or abdominal pain
- Increased urinary urgency and/or frequency.

Appendix 4

Management of simple ovarian cysts in premenopausal women

<table>
<thead>
<tr>
<th>Size</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 cm</td>
<td>No follow-up is required unless there is clinical concern.</td>
</tr>
<tr>
<td></td>
<td>These cysts are very likely to be physiological and almost always</td>
</tr>
<tr>
<td></td>
<td>resolve within 2-3 menstrual cycles</td>
</tr>
<tr>
<td>5-7 cm</td>
<td>Rescan in 6-8 weeks</td>
</tr>
<tr>
<td></td>
<td>If resolved, no follow-up required</td>
</tr>
<tr>
<td></td>
<td>If persists or increases in size, consider referral to the Women’s Centre</td>
</tr>
<tr>
<td></td>
<td>(General Gynaecology service)</td>
</tr>
<tr>
<td>&gt;7 cm</td>
<td>Refer to the Women’s Centre (General Gynaecology service)</td>
</tr>
<tr>
<td></td>
<td>MRI assessment may be necessary in some cases, but this will be</td>
</tr>
<tr>
<td></td>
<td>organised in secondary care</td>
</tr>
</tbody>
</table>
Appendix 5

Management of complex ovarian cysts in premenopausal women

| Dermoid cyst | • Referral to the Women’s Centre (General Gynaecology service).  
<table>
<thead>
<tr>
<th></th>
<th>• Laparoscopic cystectomy with ovarian preservation will usually be performed, but laparotomy ± oophorectomy might be required if the cyst is very large.</th>
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</thead>
</table>
| Haemorrhagic cyst | • Rescan in 6-8 weeks to ensure resolution.  
|               | • If not resolved, likely to be endometrioma (follow recommendations below for endometriomas) |
| Endometrioma | • Referral to the Women’s Centre (General Gynaecology service). |
| Complex cyst or solid tumour with features suspicious for ovarian malignancy | • 2 week wait referral to Cancer Centre (Gynaecological Oncology service).  
|                 | • Serum CA-125 level should be measured.  
|                 | (plus LDH, α-FP and hCG if patient <40 years’ old) |

Appendix 6

Features suspicious for ovarian malignancy in premenopausal women

• Raised serum markers:
  - CA-125 >200 IU/ml
  - Raised LDH, α-FP or hCG

• Sonographic features suspicious for ovarian malignancy:
  - solid or soft tissue tumours
  - presence of ascites
  - papillary structures
  - multilocular solid tumours
  - complex cysts >10 cm
  - invasion into adjacent organs
  - very strong blood flow

• Any single feature warrants 2 week wait referral to Cancer Centre (Gynaecological Oncology service).