COMMUNITY GYNAECOLOGY GUIDELINES

Interpreting and Understanding Pelvic Ultrasound Scan Reports

Pelvic ultrasound scan reports can be difficult to interpret. This document aims to provide a general overview in plain language for GPs in primary care. This does not replace Advice and Refer (A&R) and GPs are welcome to submit A&R about any scan report if there is ambiguity or concern.

THE UTERUS

Uterine Position:

- The position describes whether the uterus is anteverted (tilting forwards) or retroverted (tilting backwards) or axial (in between).
- Around 80% of the time the uterus is anteverted and 20% it is retroverted or axial.
- A retroverted uterus is usually normal but if discovered on a scan it is important to correlate with the clinical picture. In patients presenting with chronic pelvic pain and dyspareunia, the retroversion may be as a result of adhesions from chronic PID or chronic endometriosis.

Uterine Size:

- It is usually commented on both subjectively (for example, 'the uterus appears bulky') and objectively (the measurements of the uterus).
- In a nulliparous woman the normal anteroposterior (AP) diameter is around 3-5cm with a normal uterine length of about 6-10cm.[1]
- These figures are increased in women who have had children and decreased in postmenopausal women. A uterus is almost never abnormally small.
- Uterine enlargement is nearly always due to fibroids

Uterine Shape:

- Uterine shape is influenced by fibroids, adenomyosis and congenital abnormalities

FIBROIDS:

- The sonographer (where possible) will measure each fibroid and describe their position as submucosal (within the cavity), subserosal (outside the cavity) or intramural (within the wall of the uterus).
- Fibroids do not usually need referral unless they are causing symptoms, such as bleeding or pressure symptoms.
- Fibroids do not cause pain unless they are degenerating or rarely if they are pedunculated and torting.
- Submucosal fibroids (SMF) are most likely to cause bleeding symptoms and may mean that an IUC is unsuitable or is expelled.
    - There will often be a comment about whether or how much a SMF is distorting the cavity which is helpful when considering IUC fit
- Heavy menstrual bleeding secondary to a fibroid uterus can often be managed in primary care with medical management.

When to refer fibroids:

- Submucosal fibroids causing abnormal bleeding:
    - For consideration of a transcervical resection of a fibroid (TCRF)
- The patient wants a Mirena IUC and this cannot be accessed in primary care
- The patient has pressure symptoms
- Symptoms persist despite medical management in primary care
- The patient wishes to discuss their fibroids with a specialist
- The patient wishes to consider surgery to remove their fibroids (myomectomy).
- The fibroids are degenerating and causing pain
- There is suspicion of pedunculated fibroid torsion
- There is suspicion that the fibroid is a Leiomyosarcoma (this should be upgraded to a 2WW by the sonographer).
    - If any fibroid is rapidly increasing in size then this should raise suspicion and be referred

ADENOMYOSIS:

- The uterus will often be described as 'bulky', asymmetrical, with a poorly defined endometrial-myometrial border.
- The echotexture and echopattern of the myometrium will often be described as heterogenous.
- These patients may experience heavy menstrual bleeding or cyclical pelvic pain
- The symptoms can usually be managed in primary care (see the abnormal uterine bleeding and chronic pelvic pain pathway)

When to refer Adenomyosis:

- The patient wants a Mirena and this cannot be accessed in primary care
- Symptoms persist despite medical management in primary care
- The patient wishes to discuss further management such as GnRH analogues or a hysterectomy

EMBRYOLOGICAL ABNORMALITIES:

- Major Mullerian defects (e.g. bicornuate uterus, septate uterus) are present in around 2% of the female population and minor (e.g. arcuate uterus) in a further 3%.[2]
- The clinical implications will depend on the patient's presentation, and may include menorrhagia, amenorrhoea, subfertility and recurrent miscarriage.
- These abnormalities usually make the uterus unsuitable for IUC.

When to refer uterine abnormalities:

- These patients all require referral into gynaecology for a 3D scan +/- further investigations / management

THE ENDOMETRIUM

The endometrium

- The normal appearance of the endometrium is smooth and regular versus a disrupted appearance.
- The appearance and thickness of the endometrium varies with different stages of the menstrual cycle.
  - Endometrial thickness is 1-4mm during menstruation,
  - 5-7mm in the proliferative phase,
  - up to 11mm in the periovulatory phase and
  - 7-14mm in the secretory phase.[3]
- Abnormal thickness can be caused by polyps, fibroids, hyperplasia and cancer.
- Occasionally there will be a mention of endometrial calcification which is a benign finding and only warrants referral if there are fertility issues

When to refer endometrial changes:

- 2WWs:
  - In a postmenopausal woman with PV bleeding:
    - Not on HRT with an endometrial thickness of >or = 4mm [4]
    - On sequential HRT with an endometrial thickness >7mm
    - On continuous combined HRT with an endometrial thickness > 4mm
    - If the endometrium is incompletely visualised [5]
- 6 week / Urgent Referrals:
  - In a pre-menopausal woman with a thickened endometrium >14mm OR an abnormal looking endometrium AND:
    - And PCOS/ oligomenorrhoea
    - Irregular/prolonged bleeding

NB. Be more cautious in over 45 years and those with additional risk factors such as previous hyperplasia or obesity.

ENDOMETRIAL POLYPS:

- Endometrial polyps are common, found in around 20% of women.
- They are usually benign
- In symptomatic women (intermenstrual or post coital bleeding), polyps should be removed under hysteroscopic guidance.
- Small asymptomatic polyps (<1cm) should be left alone unless there is a history of infertility.
- The recurrence rate is approximately 15% and the patient should be made aware of this.

When to refer endometrial polyps:

- If the patient is symptomatic with intermenstrual or post-coital bleeding
- If there are fertility issues

THE OVARIES AND FALLOPIAN TUBES

The ovaries:

- As with the uterus there are subjective comments about the appearance of the ovaries and then objective comments about the size, shape and echotexture are made.
- The average normal size is 3.5cm x 2.5cm x 1.5cm. After menopause the ovaries generally measure less than 2cm x 1.5cm x 1cm.
- It is reassuring if ovaries cannot be seen on scan as this excludes pathology. Tubes are not usually seen - if visible there is usually pathology, such as hydrosalpinx.

OVARIAN CYSTS:

- There may be cysts present on the ovaries. These may include follicular cysts, corpus luteum cysts, haemorrhagic cysts, endometriomas, dermoid cysts, simple cysts, paraovarian cysts and polycystic appearing ovaries.
- Small asymptomatic cysts <5cm including: follicular cysts, simple cysts, paraovarian cysts, and corpus luteal cysts do not need referral and will resolve on their own.

When to refer ovarian cysts:

- Cysts >5cm will need onward referral as they are associated with an increased chance of ovarian cyst accident.
- Symptomatic cysts in the premenopausal woman also merit referral.
- In the postmenopausal woman any new cyst needs referral in order to exclude malignancy (2WW).
- The sonographer should comment and upgrade any referrals to a 2WW if there is suspicion of malignancy but if any cyst is suspicious or sounds atypical then refer.

HYDROSALPINX:

- A hydrosalpinx is when the fallopian tube has become filled with fluid. This means that the tube will not be able to deliver the egg from the ovary to the uterus.
- Hydrosalpinx can also leak fluid into the uterus and therefore are considered for removal if the patient is trying to conceive.
- If the hydrosalpinx is found incidentally (no pelvic pain) then they do not warrant referral.

When to refer a hydrosalpinx:

- If there are fertility issues
- If there is pelvic pain

THE PELVIC CAVITY AND POUCH OF DOUGLAS

THE POUCH OF DOUGLAS

- Fluid in the pouch of Douglas can be measured.
- Its presence is usually physiological from a ruptured follicular cyst, but it may also be associated with a ruptured ovarian cyst or PID.

When to refer fluid in the pouch of Douglas:

- If it is accompanied by pain or systemic features of infection
- This will likely be an acute presentation needing emergency care

PELVIC ADHESIONS AND TENDERNESS:

- Pelvic adhesions can indicate endometriosis, previous PID or scar tissue secondary to previous surgery.
- The sonographer will sometimes comment on 'kissing ovaries' or one ovary being adherent to the uterus.
- Patient's with pelvic adhesions can be managed with hormonal contraception but often require referral to gynaecology for consideration of adhesiolysis or ablation of any endometriosis (particularly in the presence of endometriomas).

When to refer pelvic adhesions:

- If medical management has failed in the community
- If the patient wishes to have a Mirena IUC inserted and this can't be accessed in the community
- If the patient wishes to discuss adhesiolysis
- If adhesions are suggestive of endometriosis (correlated with symptoms/presence of endometriomas)
- This will likely be an acute presentation needing emergency care

OUTDATED OR CONFUSING TERMINOLOGY

PELVIC CONGESTION SYNDROME:

- This should not be written on scan reports
- It refers to dilated pelvic vessels but has no relevance clinically
- Please flag this to the ultra-sonographer and gynaecologist so that this can be fed back

References:

Adapted with permission from Khan, A & Khan, R 'Understanding Pelvic Ultrasound Reports' in GP Online, 2010 available at: https://www.gponline.com/understanding-pelvic-ultrasound-reports/article/1032736 accessed 20/8/24

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