Advice to GPs on gynaecological pelvic Ultrasound scan (USS) - requesting and interpreting reports

The aim of this document is to provide general guidance to health professionals with the requesting and interpretation of pelvic gynaecological USSs. It is designed to improve clinical outcomes for patients, help triage patients to appropriate care, enable reassurance and avoid unnecessary referrals.

Indications for requesting a non-obstetric pelvic USS
Ideally all patients should have an abdomino-pelvic examination with speculum examination of cervix and swabs if appropriate.

Indication	Comments
Chronic pelvic pain (greater than 6 months) with negative pregnancy test	Possibly indicated as this may reassure patients. Poor sensitivity for intra-abdominal pathology eg endometriosis. High sensitivity for ovarian cysts.
Deep dyspareunia (painful sex)	Possibly indicated as this may reassure patients. Poor sensitivity for intra-abdominal pathology eg endometriosis.
Suspected ovarian cancer. Think BEAT - Bloating, Eating trouble (full after a small meal), Abdominal pain, Trouble with the bladder eg, frequency. Usually applies to women over the age of 50	Ca125 and examination first. If Ca125 raised then arrange USS. With a normal Ca125, you can consider a pelvic USS if not confident with examination (esp in those over 50yrs). If a pelvic mass not obviously fibroids then 2ww referral.
Irregular or heavy periods with a normal abdominal and vaginal examination.	Not indicated. USS is not helpful in treatment planning.
Painful periods with normal abdominal and vaginal examination.	Not indicated. USS is not helpful in treatment planning.
Post-menopausal bleeding (or new discharge)	2ww referral.
Acute pelvic infection (may be tender on examination)	Not indicated.

Interpreting USS reports
Ovaries

- The average size is 3.5cm x 2.5cm x 1.5cm. After menopause the ovaries generally measure 2cm x 1.5cm x 1cm or less.
- A 'cyst' is descriptive term not diagnostic. The scanner will comment on size and texture.
- Physiological cysts are common as a part of the menstrual cycle in premenopausal women. These may include follicular cysts, corpus luteum cysts, haemorrhagic cysts and are usually accurately diagnosed by USS.
- Pathological cysts can be simple or complex. *Simple* cysts are thin walled, fluid filled and highly likely to be benign. *Complex* cysts can have more suspicious features eg solid areas, septations and internal nodules. The differential diagnoses include benign (endometriomas) and malignant causes. *Simple* cysts less than 5cm in size in asymptomatic postmenopausal women with normal Ca-125 levels do not need referral to secondary care and only a repeat scan in 3 months is needed. *Simple* cysts greater than 5 cm or *complex* cysts any size should be referred to secondary care or **use the advice and guidance referral system in Choose and Book***. In the postmenopausal woman any complex cyst or simple cyst over 5cm needs referral in order to exclude malignancy.
- Not infrequently in postmenopausal women the ovaries cannot be seen as they are usually small are can be hidden by bowel gas. If the ovaries are not seen, then it is highly unlikely that there is a significant cyst warranting referral.

Endometrium

- The normal appearance of the endometrium is smooth and regular.
- In premenopausal women 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. Abnormal thickness can be caused by polyps, fibroids, hyperplasia and cancer.
- In postmenopausal women without bleeding the endometrial thickness range is approximately 1-8mm and regular. **In the context of PMB the endometrium usually needs a biopsy when over 4mm as a guideline.**
- There is a fashion to describe endometrial measurements as 'thickened' which is incorrect. Thickened tends to imply disease and it is better practice to describe measure and whether regular or irregular.

Uterus

- The size can vary according to individual variations and parity. Bulky uterus is a subjective ultrasound description and often a normal finding.
- Fibroids do not usually need referral unless they are causing symptoms, such as bleeding or pressure symptoms

Common **incidental** findings which do not require intervention or referral (see glossary)

- Uterine fibroids
- Corpus luteal, follicular and haemorrhagic cysts
- Inclusion cysts (see below)
- Simple cysts in postmenopausal women under 5cm with a normal Ca -125
- Small amounts of fluid in the Pouch of Douglas

The reporting of incidental finds has increased with greater access to pelvic USS and 'screening' for ovarian cancer in those women with suggestive symptoms

How is the scan carried out?

- Transvaginal using a transvaginal probe. This is the preferred route as the gynaecological organs are adjacent to the probe and this avoids a full bladder. Transabdominal is the other option but difficult in overweight patients.

Glossary

- *Adnexa* – the anatomical area at the sides of the uterus.
- *Anteverted uterus* – uterus tilted forwards. This is a normal finding.
- *Corpus luteal cyst* - a physiological cyst within the ovary following ovulation.
- *Echotexture and echopattern* describes the ultrasound appearance of the myometrium
- *Endometrium* – the lining of the uterus.
- *Fibroids* – benign growth of muscle in the uterus. Can be subserosal (attached to the outside of the uterus), intramural (within the muscle of the uterus, submucous (within the uterus).
- *Free fluid* – a subjective measurement of fluid in the pelvis. Small amounts can be a normal finding. Moderate volumes might be associated with a ruptured ovarian cyst. Large volumes might indicate ascites.
- *Haemorrhagic cyst* - a physiological cyst containing blood within the ovary usually following ovulation.
- *Hydrosalpinx* – small pockets of fluid within the fallopian tube usually as a result of pelvic infection or surgery. If the patient is clinically well they do not normally need referral.
- *Inclusion cyst* – Benign unilocular cyst less than 10mm.
- *Polycystic ovaries* – multiple small peripherally placed cysts in premenopausal women associate with menstrual irregularity, infertility and facial hair growth
- *Pouch of Douglas* is the anatomical area behind the uterus.
- *Retroverted uterus* – uterus tilted backwards. This is a normal finding.

Who to contact if not sure

Advice and Guidance - use the advice and guidance referral system in Choose and Book for an email reply to a query within 5 days.

References

SIGN. Investigation of post-menopausal bleeding. SIGN guideline 61, 2002.
http://www.sign.ac.uk/guidelines/fulltext/61/section3.html

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