Gynaecology Ultrasound Protocol

Specific staff groups to whom this policy directly applies	Likely frequency of use	Other staff who may need to be familiar with policy
Sonographers	Daily	Health Care Assistants

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Purpose	To ensure the imaging and reporting of normal and abnormal pelvic organs are optimally undertaken by ultrasound practitioners, with clear guidance for the referrer where needed.

Contents

1: Referral Pathway:

- Referrals for gynaecological ultrasound are accepted along a wide range of pathways, including GP and Consultant referrals.

- Prior to the US examination, the sonographer should consider the clinical referral. A clinical question should be provided.

- An appreciation of the clinical history is very important in reaching a diagnosis, as there a wide variation in the normal appearance of the female pelvic anatomy.

- The clinical details include the presenting symptoms, age, parity, menstrual history, LMP, previous gynaecological surgery and any current HRT must all be recorded.

2: General examination:

- The sonographer should confirm the patient's identity in accordance with the Korus patient identification policy.

- A full explanation of the procedure must be given to the patient before scanning commences, and verbal consent obtained and documented within the ultrasound report.

3: Best practice:

- All patients should be asked to attend with a full bladder.

- Transabdominal (TA) and Transvaginal (TVS) evaluation are complementary to each other and ensure a thorough and systematic examination. Therefore, where appropriate TVS and TA should always be offered and it is the patient's discretion to decline or accept.

- TV scanning can be offered to patients who are Virgo intacta, above 18 years of age, and the hymen is believed to be intact.

- The patient has read and understood the information on the US Pelvis letter and verbally consented to proceed with the examination.

- The patient is informed that they can end the examination at any point.

4: Contraindications - TV Scanning:

- Contraindications include:
    - Paediatric Age Group, below 16 years of age
    - Vaginal stenosis/ obstruction
    - Females who decline TV
    - If unable to gain informed consent from patient/ patient advocate
    - Premature rupture of membranes during pregnancy.
    - Transgender surgery, please seek advice

- Although not absolute contraindicators, conditions including age-related atrophy, vaginismus, vaginitis and recent surgery may make TV scan particularly uncomfortable for the patient.

- Patients who are survivors of sexual abuse or have suffered from Female genital mutilation should be treated with the utmost sensitivity.

- Sexual status, sexuality, religious or personal beliefs of the person or the ultrasound practitioner should not be barriers to offering a TV ultrasound.

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**Clearly state in the report if a TV scan was not performed and give the reason why.*

- It is recommended that a TA approach is employed first, to evaluate the whole pelvic area.
- In cases where the bladder is empty and a decision is made to continue straight to TVS, then at least one representative TA image should be made of the pelvis.
- A male sonographer performing TVS, must ensure a female chaperone and this documented on the report.
- Ensure adequate privacy to allow the woman to undress and lie on the examination couch. A paper sheet should be provided.
- Should the patient experience significant discomfort the examination should be terminated.
- Enquire about latex allergies and use latex free sheaths if necessary.

5: Guidelines for the examination:

- Include in the report: LMP / or menopausal status (i.e., more than 1 year since LMP = post menopausal), contraceptive status and/or HRT status.
- The following anatomical structures should be examined:

1. Uterus	1. position, size (length x width x depth), outline and echo-pattern. 2. Assess for ultrasound features of **adenomyosis**: • Micro-myometrial cysts • Marked heterogeneous appearance of myometrium • Posterior acoustic 'venetian blind' effect • asymmetry of anterior/posterior wall myometrium 3. Assess for well-defined **fibroids**: • Note the location (subserous, intramural or • submucous) and the size of the largest fibroid. • Comment on any submucous/intra-cavity fibroids or distortion of the cavity and give the size.
2.Endometrium Assessment	1. Measure the anterior-posterior diameter of the endometrium in the thickest section (**mm**) • Measurement of endometrial thickness - not to include thickness of any endometrial fluid

	• Comment on presence of endometrial fluid and measure separately (**mm**). The endometrial thickness is calculated by measuring either side of the cavity (mm) and adding both measurements together • Comment on endometrial thickness and appearance in relation to LMP or postmenopausal status • Describe endometrium ie homogenous or heterogenous • Describe presence of focal mass and size within cavity. If possible give differential diagnosis • In some patients endometrium may be too thin to measure, state this in report • If endometrium poorly seen or the myometrial and endometrial interface indistinct, state this in report
3. Assessment of PMB, Endometrial polyps, IMB	1. Measure the endometrium • Assess a heterogenous endometrium with colour Doppler • ?polyp look for feeding blood vessels using colour doppler • Comment on submucosal fibroid. • Document if patient on HRT/Tamoxifen. **2. As per PMB Gynae Pathway** • ***See full Gynae PMB Pathway document for more details** 3. **Location of IUCD** • Ask patient what type of IUCD they have? Copper or Mirena • Comment on type of IUCD /image location of IUCD. Faculty of Sexual & Reproductive Healthcare Dec 2022 Guideline states: *The GDG suggests that as a general guide, any of the following findings would usually be an indication to suggest that the IUCD is removed +/- replaced:* • *IUCD >2 cm from the fundal aspect of endometrial cavity; IUCD within the cervical canal (fully or partially); or IUCD user experiencing symptoms that may be related to malpositioned IUCD (e.g. pain or bleeding).* • *Clinicians should consider the need for Emergency contraception and follow-up pregnancy testing when an IUCD is found to be malpositioned.* • *The lower end of the IUCD should always be checked in relation to the cervical canal. So, in small cavities, even if the IUCD has not dropped by 2cms, but it abuts the cervical canal, this should be mentioned as the Clinician may need to consider removal +/- replacement.*

	• *If either a Copper or Mirena IUCD is not located on ultrasound, a full Abdominal xray (not solely a pelvic xray) request should be sought from a Radiologist and appointment scheduled for the patient.*
4. Ovaries	• size (length x width x depth and volume calculated). • Image and measure dimensions of cyst/mass • Describe mass in relation to uterus and ovaries ie are they identified separate to mass • Describe appearance of the mass (solid/cystic/ complex) • Describe if thin walled, internal echoes, thick septae, solid component etc are seen. • Comment on colour flow presentation of complex. ****SEE IOTA APPENDIX 1**
5. PCOS	Assess for ultrasound features of PCOS: • Increased ovarian volume >12mls. (An accurate ovarian volume cannot be calculated if the ovary contains follicle =>10mm diameter) • >20 follicles measuring 2-9mm • Advise correlation with clinical features and biochemical hormonal profile. • Increased stromal echogenicity is specific to PCO. • Pts <25 years with the clinical indication similar to irregular periods are expected to have multi-follicular ovaries. Please correlate with clinical and/or biochemical signs of hyperandrogenism. • If biochemical profile is normal and documented on request form and there is a history of irregular PV bleeding. • Patients < 25 years of age if there is concern for endometrial thickening, uterine anomaly or for possible androgen producing pathology.
6. Pouch of Douglas	for cysts, masses and free fluid.
7. Adnexa	Assess for adnexal cysts, masses or free fluid, including pathology such as hydrosalpinx
8. RENAL SCAN	Assess kidneys for obstruction if fibroids or ovarian mass etc found. Any endometriosis gynae ultrasound scan should include Kidneys. Add UKIDB examination to visit.

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Appendix 1: IOTA Rules