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Gynae Ultrasound Guidelines

Protocol for Gynaecological Ultrasound Scan

TA and TV Scanning is the recommended technique for the assessment of the uterus, endometrium and ovaries in patients of 16 years of age and above (subject to contraindications).

TA Scan with a full urinary bladder is offered to patients under 16 years of age, with full informed consent from the child, their parent or guardian.

A TV scan should be offered with an empty urinary bladder to all patients over 18 years of age unless contraindicated (see page 2).

A TV scan may be required in the 16-18 year age group depending on clinical indication. Consultant Radiologist/ Sonographer who has ability to scan this age group can do so.

An ultrasound examination should only be undertaken with a valid signed request form / online request that has been received and vetted/ accepted as per departmental protocol.

A chaperone must be present during both the TA & TV Scans to act as patient and staff advocate. Chaperone to be in the room alongside the patient during the TV scan, whilst ensuring the privacy and dignity of the patient at all times.

Ensure patients name and hospital number are correctly labelled on the ultrasound machine.

Imaging /Report to include:

- State clinical indication in report
- Statement of mode of scanning- TA and TV as appropriate
- State full verbal informed consent given/declined
- State reason why, if TV Scan not performed
- Document Latex Allergy Status if Latex probe covers are used
- State LMP and whether cycle is regular / irregular or pre/post-menopausal
- Document if patient is on OCP / implant etc
- Document if patient is on HRT, combined or single hormone or on tamoxifen
- Document if patient has a IUCD and whether it is a Copper coil or a Mirena Coil
- Document any relevant surgery eg hysterectomy/ oophorectomy
- Document chaperone present, their full name, full Job title
- Document full name and full job title of any Trainees present
- Description and imaging of size and position of uterus LS x AP x TR
- Assess uterine outline, check myometrium. Note any development anomalies

- Image and assess cervix, document if poorly visualised or appears bulky
- LS Endometrial measurement and description/ image
- Use colour Doppler to assess endometrium/ myometrium/ ovaries as appropriate
- Description/imaging and correct labelling of both ovaries
- Image and correctly label both adnexa
- Comment on any adnexal abnormality, presence or absence of any free fluid
- Conclude report with Impression/ Scan findings
- Document full name and job title of staff confirming scan findings eg no Foetal Heart Beat
- Cleaning of TA/TV Transducer to be documented in log book and/or patient ultrasound report (as per local policy)
- Check images have gone to CSCLIENT / VIEWPOINT (PACS) or send images from spooler/ hard drive at end of scan session.

Contraindications - TV Scanning

- Paediatric Age Group, below 16 years of age
- Transgender surgery, please seek advice
- Vaginal stenosis/ obstruction
- Females who decline TV Scan or where clinician feels is not appropriate
- If unable to gain informed consent from patient/ patient advocate
- Premature rupture of membranes during pregnancy

The above is not an exhaustive list.
Clearly state in the report if a TV scan was not performed and give the reason why.

TV scanning can be offered to patients who are Virgo intacta, above 18 years of age, and the hymen is believed to be intact. These patients should have read the patient information leaflet and sonographer to check they have understood this information. Sonographer can use the autotexts for VI status on PACS (see below) as documentation for verbal consent and counselling in their reports. The patient is informed that they can end the examination at any point.

Autotext: Virgo Intacta TV Scan Agreed
Patient is above 18 years of age and has a Virgo Intacta Status.
A US TV (transvaginal) scan was offered to the patient explaining that the procedure is likely to be uncomfortable, there is a small risk of infection and that they have the right to decline this part of the study.
The patient has read and understood the information on the US Pelvis leaflet and verbally consented to proceed with the examination.
The patient has been informed to follow the post procedure advice if needed on the patient information leaflet.

Autotext: Virgo Intacta TV Scan Declined
Patient is above 18 years of age and has a Virgo Intacta Status.
A US TV (transvaginal) scan was offered to the patient explaining that the procedure is likely to be uncomfortable, there is a small risk of infection and that they have the right to decline this part of the study.
The patient did not consent to proceed with the examination and therefore a TV scan was not performed.

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

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.

Unclear Ultrasound Scan findings

Either:

- Seek second opinion from Consultant Radiologist/ Senior Sonographer in department at time of scan.
- Discuss images and report with Consultant Radiologist/Senior Sonographer as appropriate.

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Endometrial Assessment

Best Practice TA and TV –unless contraindicated

As per routine female pelvic ultrasound scan, to include:

- Measurement/imaging of endometrial thickness (mm)- not to include thickness of any endometrial fluid
- Comment on presence/ measurement of endometrial fluid separately (mm). If fluid is present endometrial thickness is calculated by measuring either side of the cavity (mm) and adding both measurements together
- Comment on endometrial thickness /appearance in relation to LMP or postmenopausal status
- Describe/image endometrium ie homogenous /heterogenous
- Describe presence of mass and size within cavity- give differential diagnosis if possible.
- In some patients endometrium may be too thin to measure, state this in report
- If endometrium poorly seen or myometrial/endometrial interface indistinct, state this in report
- Comment if cavity distorted eg by submucosal fibroids
- Comment if there is gross asymmetry of myometrial thickness either side of endometrium
- For IMB, PCB,? Polyp and PMB -TA and TV Ultrasound (unless contraindicated) use of colour Doppler is recommended best practice
- Assess a heterogenous myometrium with colour Doppler
- ? fibroid ?polyp look for feeding blood vessels using colour doppler
- Document if patient on HRT/Tamoxifen. Comment on endometrial appearance in relation to these.
- If endometrium measures >4mm see PMB care pathway protocol for symptomatic and asymptomatic patients. Type in report: HIGH PRIORITY Email to GP (as appropriate). Secretarial Action required.
- In Postmenopausal patients if patient is asymptomatic and endometrium measures up to and including 10mm, clearly state in report whether it is inhomogenous or if there is increased vascularity noted within (see Gynae PMB Flowchart document).

Assessment of PMB, Endometrial polyps, IMB, PCB

Best Practice TA/TV- unless contraindicated

- Use colour doppler when assessing the endometrial cavity even when appears homogenous in echopattern- actively look for feeding blood vessels on colour doppler
- Clearly state in the report whether fluid was seen in the cavity. State whether it is a trace of fluid or whether the cavity is significantly distended. If it is significantly distended or the fluid is complex in nature (septations/ echoes within) – Gynae referral recommended for follow up. If only a trace of fluid and it is anechoic no follow up is required.

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Ovarian Cyst/ Pelvic Mass

Best practice TA and TV- unless contraindicated

As per routine female pelvic ultrasound scan, to also include:

- Image and measure dimensions of cyst/mass
- Describe mass in relation to uterus and ovaries ie are they identified separate to mass
- Follow UHB ORADS Protocol. Describe morphological appearance of the mass ie is it solid/cystic/ complex. Include whether simple, thin walled, internal echoes, thick septae, solid component etc are seen.
- Comment on colour flow presentation of complex masses
- Assign ORADS Category of Risk where possible and comment on likeliest aetiology(s) of mass in report, give differential diagnosis if possible
- Quantify presence of free fluid ie trace, small, large amount or none present
- Assess kidneys for obstruction if fibroid(s)/ bulky cervix/ ovarian mass etc found
- Assess kidneys if developmental anomaly found eg bicornuate uterus
- Ovarian cysts found in premenopausal women - Follow UHB ORADS protocol.
- Ovarian cysts found in post-menopausal women - Follow UHB ORADS protocol.
- Suspected pelvic mass - Follow UHB ORADS Protocol.

- **ORADS score to be included in all Gynae US reports:**
    - **Incomplete examination, no ovaries seen ORADS 0 (Referrer to decide if further imaging required)**
    - **A normal study ORADS 1**
    - **Benign cysts/lesions ORADS 2**
    - **Paediatric TA scans.**

- In cases of suspected malignancy, Report to include HIGH PRIORITY, Email to GP (if appropriate), Secretarial Action Required. Discuss further imaging with Radiologist.

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Polycystic ovaries- Rotterdam Paper and NICE Guidelines

Best practice TA and TV- unless contraindicated

- Image/ report as per routine female pelvic ultrasound - measure ovarian volume. State in your opinion if polycystic ovaries, defined as one of the following:
    - Increased ovarian volume >12mls. (An accurate ovarian volume cannot be calculated if the ovary contains a follicle equal or greater than 10mm diameter)
    - >20 follicles measuring 2-9mm

Distribution of follicles and description of stroma is not required for diagnosis but increased stromal echogenicity is specific to PCO.

- The presence of a single PCO is sufficient
- Advise correlation with clinical features and biochemical hormonal profile.

Vetting PCOS Requests

Anyone <25 years with the clinical indication as/similar to 'irregular periods. PCOS?' – We should reject saying:

Unfortunately we do not perform USS TA/TV Pelvis for patients < 25 years of age for ? PCOS as they are expected to have multi-follicular ovaries.
Please correlate with clinical and/or biochemical signs of hyperandrogenism.
If patients have a history of oligomenorrhoea and clinical or biochemical signs of androgen excess, a diagnosis of PCOS can be made without a scan in patients < 25 years.
If biochemical profile is normal and documented on request form **and** there is a history of irregular PV bleeding we will accept the scan.
We also accept referrals for patients < 25 years of age if there is concern for endometrial thickening/ hyperplasia, uterine anomaly or for possible androgen producing pathology.

Hyperstimulated Ovaries: see Trust Guidelines for Clinical presentation
State whether mild, moderate or severe OHSS, image and report 3 dimensions and volume of both ovaries.
Mild OHSS- U.S. Findings ovarian size <8cm
Moderate OHSS- U.S. Evidence of ascites, ovarian size 8-12cm
Severe OHSS- U.S. Evidence of gross ascites, ovarian size >12cm
If hyperstimulated ovaries are confirmed contact GAU at BHH/ GHH regarding scan findings and patient support.

Location of IUCD

In addition to routine female pelvic scan

- 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:

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 2 cms, 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.

Post Fibroid Embolisation Scan

Follow up scan to be arranged with Dr Paul Crowe at BHH.
VET as Full Bladder FAO Paul Crowe list at BHH.

Or

If scan has been scheduled on sonographer list : document uterine size and that of largest fibroid. Compare fibroid size to pre Embolisation scan, comment on its' vascularity.
Document has the patient reported an improvement in symptoms or otherwise. Inform / email Dr Crowe images and report available on PACS.

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