ISUOG Basic Training

Writing the Gynecological Ultrasound Report

Learning objectives

At the end of the lecture you will be able to:

- Write a clear, concise and accurate gynecology ultrasound report
- Understanding the importance of writing a good gynecology ultrasound report
- Understand the basic principles of gynecology ultrasound reporting

Key questions

1. What are the key features of a gynecology ultrasound report?
2. How can I make sure I write a good report?

What is an ultrasound report and why is it important?

- Medico-legal document
- Primary means of communication between sonologist, referring clinician and patient
- Constitutes a clinical opinion of a specialist's interpretation of images
- Aim: to answer the original clinical question and provide information - patient management
- Should be accurate, clear, concise and logical

The imaging examination

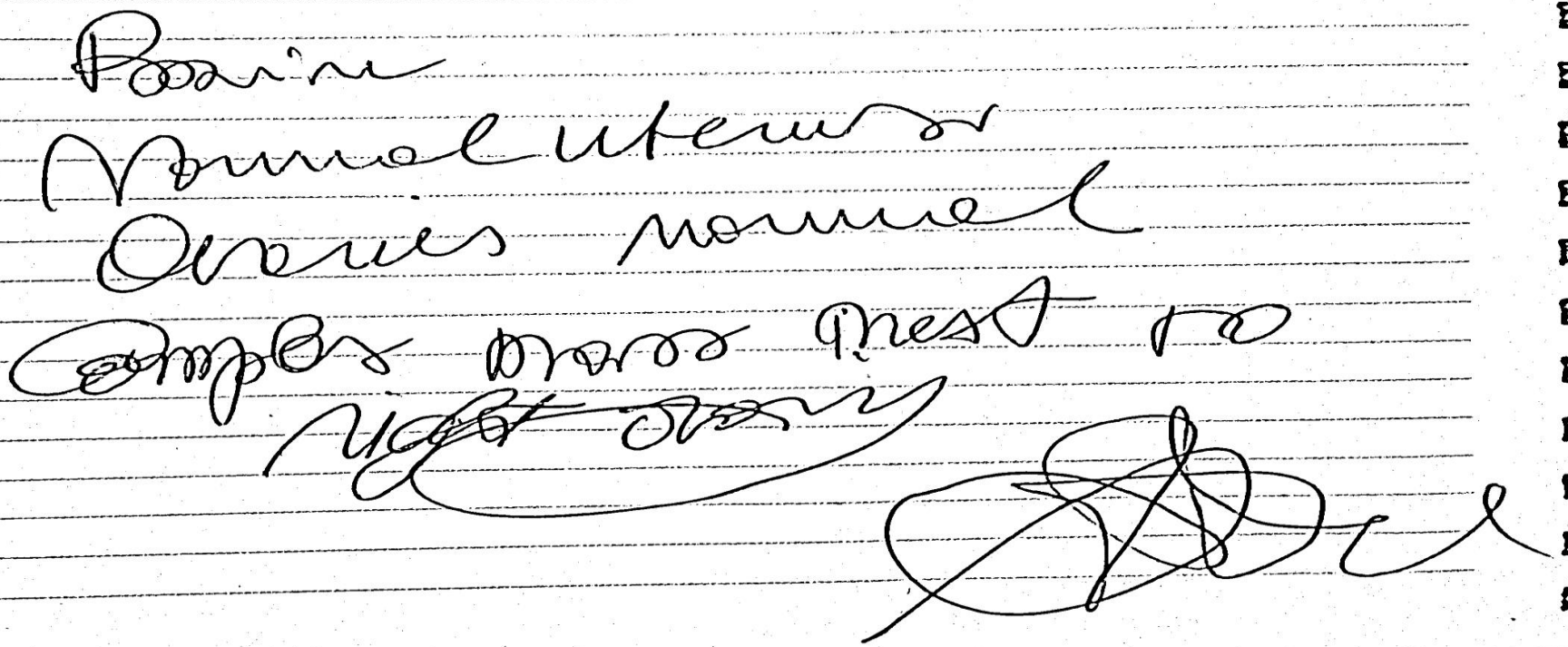
- **Before** the examination
  - What is the clinical question?
- **During** the examination
  - Specific observations
- **After** the examination
  - Judgment/ conclusions/ diagnosis

Basic guidelines for writing a report

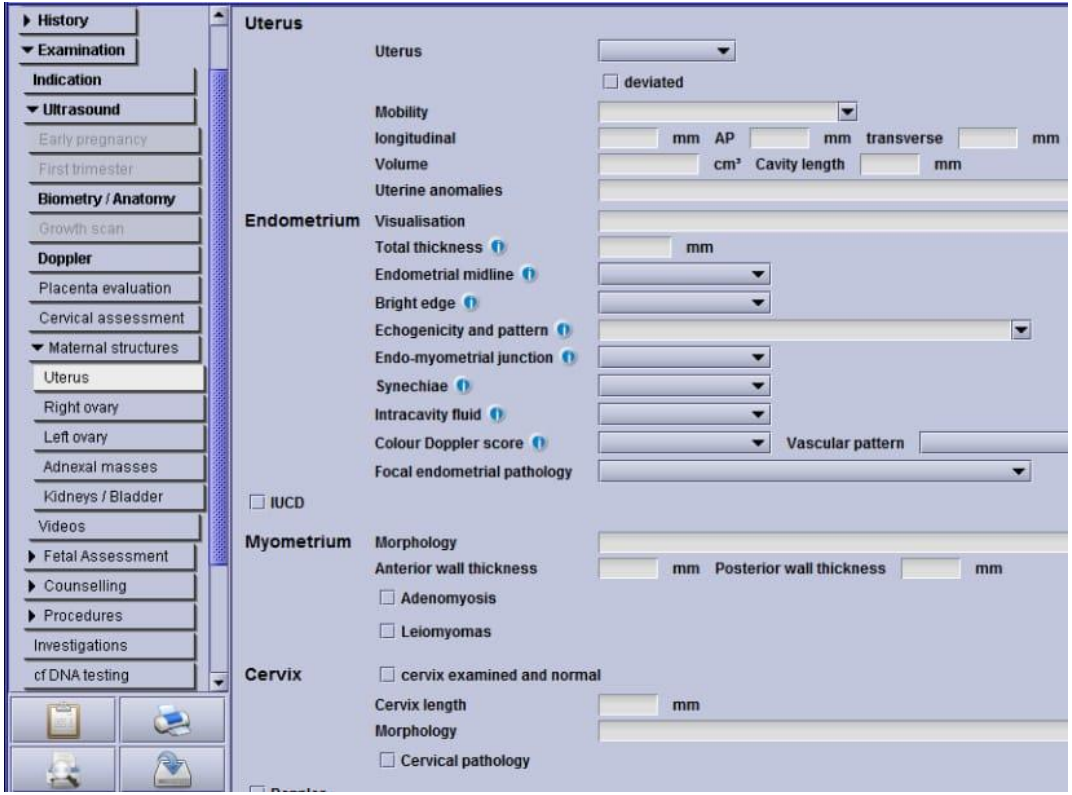
- Should be written and issued by the sonologist performing the examination
- Integral part of the entire examination
- Should be written as soon as possible after the examination is completed
- Sonologist is fully responsible for the accuracy and content
- Sonologists should be aware of their limitations and seek advice where necessary

Basic guidelines for writing a report

- Mostly printed
- If handwritten, black ink should be used
- Report must be appropriately dated, signed with reporter's name and designation and filed in medical records.
- Use of a pre-existing template/ electronic database
  - Is it helps maintain consistency of reporting
  - Allows research and audit to take place
  - Ensures adherence to local standards



Example of reporting database



Report style

- Clear and concise
- Use present tense
- Easily understood using standardized terminology
- Avoid technical jargon
- Abbreviations should only be used when standard
- Any actions or recommendations should be clearly reported
- A succinct conclusion should be included
- Report should be conclusive where possible and indicate when the appearances are consistent with a specific diagnosis
  - Where this is not possible, alternative explanations may be offered

Summary of report contents

- Clinical history
- Structures examined
- Description of findings
- Interpretation of findings
- Conclusion

Report contents: clinical and technical details

- **Patient details**: Name, surname, DOB
- **Sonologist** details
- Name of **chaperone** (when present)
- **Place** of scan
- Type of ultrasound **machine** used: model, probe features
- Examination **method**: Transvaginal, transrectal and/or abdominal
- **Indication** for scan
- Any **limitations**: Body habitus, overlying bowel gas
- **Basic history**
    - Includes LMP, length of menstrual cycle, pregnant or not, parity
    - Menopausal status, contraception or HRT use

Examination outline: uterus

- **Orientation** (version/ flexion)
- **Position** (e.g. axial/ laterodeviated left side/ right side)
- **Size** (length of the entire uterus, largest anteroposterior diameter of the corpus of the uterus, largest transverse diameter of the corpus of the uterus)
- General **echotexture**/echopattern
- **Shape** (e.g. globular)
- External **contour** (regular/lobulated)
- **Mobility**/sliding sign

Examination outline: endometrium

- **Assessment** (visible/not visible/assessable/not assessable) → because of position/version/flexion (e.g. axial)/because of presence of pathologies, etc.
- **Thickness/ appearance** (e.g. synchronous with menstrual period/postmenopausal status/medical treatment? etc.)
- **Endometrial-myometrial junction** (regular/ irregular/ interrupted/ not assessable)
- **Focal pathology** (e.g. fibroid/polyps/other)

Examination outline: myometrium

- **Myometrium:**
  - Overall myometrial echogenicity (homogeneous/ heterogeneous)
  - Presence of diffuse/localised abnormalities (e.g. fibroids, adenomyosis/ size/ location etc)
- **Cervix** (if normal, usually not mentioned)
- Any abnormalities noted in **endometrium** or **myometrium**
  - report using IETA and MUSA terms and definitions

Examination outline: adnexa

- Both adnexa must be examined
- Size of both ovaries should be measured in 3 orthogonal planes
- Number and pattern of follicles where present, phase of cycle in premenopausal
- Mobility: mobile/reduced/fixed (to uterus/bowel/pelvic side wall)
- Tenderness on pressure
- Fallopian tubes if visible: possible hydrosalpinx, haematosalpinx, pyosalpinx
- Any abnormalities noted
  - In the case of an adnexal mass this should be reported using IOTA terms and definitions

Examination outline: free fluid/ ascites

- **Comment on presence of free fluid**
  - Location (Pouch of Douglas, uterovesical fold, adnexal region)
  - Amount
  - Ascites
  - Appearance: Could represent clear (anechoic) fluid in keeping with recent ovulation or be echoic/ low level/ with clots in keeping with blood/ pus

Pelvic mass

- If a large pelvic mass is noted, a transabdominal scan must be performed to fully assess the mass
- If a gynecological malignancy is suspected, it is good practice to complete a full upper abdominal survey (kidneys/ liver/ spleen/peritoneum), if the sonologist is qualified to do so
- Or refer onto a specialist

Conclusion of report

- Conclusion should be succinct
- Report abnormal findings with likely diagnosis or differential diagnosis
- Could suggest further investigations, management

Case example 1

- 37 year old
- P2 (NVD)
- Irregular vaginal bleeding for the last 3 months
- Negative urine pregnancy test

Ultrasound report

Uterus anteverted. Echogenic focus seen with a feeding vessel. Normal appearance of both ovaries. No masses or free fluid seen.

Conclusion:

Ultrasound findings demonstrate an echogenic focus within the uterus with a feeding vessel.

Ultrasound checklist

Concise style ✓
No ambiguous terminology ✓
No inappropriate technical language ✓
Irrelevant information avoided ✓
Limitations stated ✗
Addresses the clinical question ✗
Abbreviations used carefully ✓
Conclusive where possible ✗
Accurate report ✗

- **No measurement given for any of the structure**
- **Does not give a differential diagnosis**

Case example 2

- 53 year old
- Post-menopausal
- Abdominal pain and bloating
- Previous hysterectomy

Ultrasound report

The uterus is absent (hysterectomy noted). Normal left ovary. The right ovary contains a complex mass. No free fluid in the pelvis.

Conclusion:

Complex mass in the right ovary

Suggest referral to the gynecology rapid access clinic.

Ultrasound checklist

Concise style

No ambiguous terminology

No inappropriate technical language

Irrelevant information avoided

Limitations stated

Addresses the clinical question

Abbreviations used carefully

Conclusive where possible

Accurate report

- **No measurement given for any of the structures**
- **Does not give a differential diagnosis**

Case example 2

- 53 year old
- Post-menopausal
- Abdominal pain and bloating
- Previous hysterectomy

Ultrasound report

TV ultrasound performed with verbal consent. Good views obtained. The uterus is absent (hysterectomy noted). The left ovary is visible, measuring 10 x 15 x 18mm, is mobile and appears quiescent (compatible with age and postmenopausal status). The right ovary contains a smooth multi-locular mass (5 locules), measuring 100 x 98 x 125mm, with anechoic content, no crescent sign visible. The lesion is mobile and non-tender. IOTA color score 1. No free fluid is seen within the pelvis.

Conclusion:

Smooth and avascular multi-locular mass (5 locules) in the right ovary.

Suggest referral to the gynecology rapid access clinic.

Ultrasound checklist

- Concise style
- No ambiguous terminology
- No inappropriate technical language
- Irrelevant information avoided
- Limitations stated
- Addresses the clinical question
- Abbreviations used carefully
- Conclusive where possible
- Accurate report