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Qualification for sonographers in reproductive medicine.

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ESHRE Campus Course
Ultrasound in reproductive medicine
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Disclosure

Nothing to disclose



Learning objectives

- Understanding of the European structure for qualifications of sonographers.
- Understanding of the different levels for sonographers
- Understanding the tools to develop an training program for sonographers

Outline

- Definition of sonographers
- Level of practice
- Levels of sonographers
- Setting up a training system (example)

Definition sonographers

Sonographers are healthcare professionals without a medical degree who use ultrasound for medical purposes in some specialities in some European countries.

Levels of practice

- Ultrasound can be practised at different levels
- Great variations in medical systems between countries
- Great variations in organisations of different specialities
- Difficult to strictly define levels of practice and training requirements
- 3 levels of minimal training requirements

Levels of sonographers

Level 1:

- to perform common examinations safely and accurately
- to recognise and differentiate normal anatomy and pathology
- to diagnose common abnormalities within certain organ systems
- to recognise when referral for a second opinion is indicated

Education level: Post graduate specialist training programs

Levels of sonographers

Level 2

- to accept and manage referrals from Level 1 practitioners
- to recognise and correctly diagnose almost all pathology within the relevant organ system
- to perform basic, non-complex ultrasound-guided invasive procedures
- to teach ultrasound to trainees and to Level 1 practitioners
- to conduct some research in ultrasound

Education level: sub-speciality training programs.

Levels of sonographers

Level 3

- to accept tertiary referrals from Level 1 and 2 practitioners
- to perform specialised ultrasound examinations
- to perform advanced ultrasound-guided invasive procedures
- to conduct substantial research in ultrasound
- to teach ultrasound at all levels
- to be aware of and to pursue developments in ultrasound

Education level: advanced level of training programs

Minimal training requirements

- Detailed syllabus by national and /or European speciality groups
 - Necessary amounts of practical experience
 - Theoretical knowledge
 - Practical skills
 - Minimum number of scans
 - Supervised scanning

Minimal training requirements

- Independent scanning, with review by a designated trainer
- Recommendations and/or regulations for evaluation and interpretive skills
- Accreditation of individuals
- Continuing professional education and development

Theoretical knowledge Syllabus

- Ultrasound physics
- Safety of ultrasound and contrast agents
- Ultrasound instrumentation
- Scanning techniques
- Ultrasound artefacts
- Anatomy (of the relevant body systems)
- Pathology (of the relevant body systems)

Theoretical knowledge Syllabus

- Ultrasound findings in the normal condition
- Ultrasound findings in pathological conditions
- Scan interpretation
- Indications for ultrasound and inter-relationship with other imaging modalities
- Ultrasound-guided procedures

Syllabus ultrasound in gynaecology of the RCOG

- Learning objectives
- clinical history.
 - respect to the patients' privacy, cultural and religious needs.
 - select the right equipment
 - conduct the examination effectively in a gentle and considerate manner
 - understand of normal morphological ultrasound appearances of the female pelvis and its variations during the menstrual cycle

Syllabus ultrasound in gynaecology of the RCOG

Learning objectives

- diagnose common gynaecological abnormalities and to interpret ultrasound findings in the context of patient's clinical history and symptoms
- understand the limits of their competence and the need to seek advice where appropriate
- write a structured report
- learn when to refer patients where appropriate

<http://www.rcog.org.uk/files/rcog-corp/uploaded-files/ED-US-Module-4-Int-Gynae.pdf>

Take home message

- Great variation in countries and specialities
- Different levels of practice
- Different levels of sonographers
- Develop a theoretical and practical syllabus
- Continuing accreditation and training of staff



References

- Training in Diagnostic Ultrasound: Essentials, Principles and Standards: Report of WHO Study Group 1998. **WHO** technical report series: 875
- "Building a European Ultrasound Community", **European Federation of Societies for Ultrasound in medicine and biology (EFSUMB)** 2006
- Intermediate Ultrasound in Gynaecologie, **Royal College of obstetricians and gynaecologists (RCOG)**, 2009
