

Professional Diploma of Fetal Medicine



ASFMS

الجمعية العربية لطب و جراحة الجنين

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Professional Diploma of Fetal Medicine

General information :

The professional Diploma in fetal medicine offers advanced education for candidates. Diploma combines theoretical, Practical onsite training then an exam.

Theoretical will be 60 hours and hands on training will be 100 hours

Onsite training is conducted at CAIRO according to regulations by ASFMS regulation committee.

Finally candidates will have to pass an exam (pass rate is 70%).

EDUCATIONAL GOALS:

Participants will receive high-level training in all relevant aspects for the practice in Fetal Medicine provided by sub-specialists with a consolidated reputation and experience in clinical practice, teaching.

Specific goals of the Professional Diploma:

- 1) To provide participants with up-to-date knowledge & skills in all aspects of Fetal Medicine, from Screening Ultrasound & Prenatal Diagnosis methods to Advanced Fetal Ultrasound, covering all Fetal Medicine conditions.
- 2) To create a space to share experiences & knowledge with the experts.
- 3) To promote debate & critical thinking about new Advances in Fetal Medicine.
- 4) To receive face-to-face training with real cases focusing on very specific aspects of Fetal Medicine.



Professional Diploma of Fetal Medicine

Specific Information

Addressed to:

Specialists in Obstetrics, gynecology, radiology and family medicine.

Language:

English

Direction and Scientific Committee:

Scientific Committee of the ASFMS.

Main components of the Professional Diploma (click for details):

1. Theoretical Education.
2. Practical Training (The Log book)..
3. Exam: Theoretical & Practical exam (Success Rate at least %70).

Technical Secretariat:

contact@asfms.org

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00201000108275 (WhatsApp. contact number).

1. Theoretical Education

1.1. Onsite Live Contents:

All contents are offered through a Custom-Made Web-Based Platform, accessible through a personalized password for each participant.

The teaching program includes 6 thematic modules covering all relevant aspects for the practice of Maternal & Fetal Medicine. Each module is include:

- 10 to 20 Theoretical Live Presentations with intensive use of clinical cases & images/videos as appropriate;
- A discussion forum opens Live during the duration of the Diploma.

1- MODULE 1: Fetal Anatomy & Abnormalities, Placenta & Amniotic fluid.

2- MODULE 2: : Doppler, 3/D & 4/D.

3- MODULE 3: Gynecological Ultrasound Scan.

4- MODULE 4: Fetal Echocardiography.

5- MODULE 5: First Trimester Ultrasound.

6- MODULE 6: Interventional Ultrasound & Miscellaneous

1.2. Onsite Live Theoretical Teaching:

2 days Live Sessions Every 2 months.

2. PRACTICAL TRAINING:

2.1. On-site Hands on Training Sessions (The Log Book):

Participants will take alot of cases

2.2. Self-training (The Log Book):

For each module,a set off Ultrasound images must be obtained by the participant & sent in an electronic format through her/his personal interactive platform. Images must be obtained according to pre-established criteria for the acquisition, quality and magnification, and include virtually all common ultrasound exams conducted in the practice of Advanced Fetal Medicine.

MODULE 1: Second Trimester Anatomical standard sections & U/S relevant images of a minimal number of well-documented anomalies.

MODULE 2: Doppler images of the most common vessels & the Fetal 3/D & 4/D images.

MODULE 3: Gynecological images in different clinical scenarios.

MODULE 4: Cardiac structures & Doppler images in all relevant sections.

MODULE 5: First Trimester Standard sections &the U/S Markers.

MODULE 6: Importance of Amniocentesis & how to perform it safely.

All images must be evaluated for quality criteria & approved by one expert; then send this pictures for fetal medicine foundation at London to be certified there.

3. Examination:

At the end of all modules, the participant must pass a theoretical and practical exam (success rate at least %70), after success of exam Egyptian candidates will take a card of fetal medicine specialist from Egyptian medical syndicate.

The specific topic for each participant will be agreed upon with one expert, who will act as the supervisor and evaluator on completion of the research work. Participants can obviously ask & receive advice for completing their research work, but they are expected to produce it mostly on their own.

Things to take into account before you pre-enrol:

Requirements:

- Candidates must be specialists in Obstetrics, gynecology, radiology and family medicine.
- Students must be able to demonstrate competence in English.
- The Graduation Certificate.
- All Post-graduate Certificates.
- The most recent C.V.

The management committee reserves the right to choose the applicants it deems most appropriate from among all the candidates

Details of the Modules

Module One: Fetal Anatomy / Abnormalities & Fetal Size, Liquor & The Placenta

1. Safe use of the U/S machine & the use of correct settings.
2. Accurate measurement of BPD, HC, AC, FL.
3. Accurate documentation of measurements & observations, including chart plotting.
4. Assessment of Liquor Volume; Measurement of AFI.
5. Assessment of Liquor Volume; Measurement of MVPD.
6. Assessment of Placental position using the Trans-Abdominal Route.
7. Arranging appropriate follow up or referral.
8. Producing proper written summary & the interpretation of results.
9. Accurate measurements of TCD& posterior horn of Lateral Ventricles.
10. Confirm normal Anatomy of Head & Face.
11. Confirm normal Anatomy of CNS.
12. Confirm normal Anatomy of Spine.
13. Confirm normal Anatomy of Chest.
14. Confirm normal Anatomy of Abdomen.
15. Confirm normal Anatomy of Limbs.
16. Third trimester scan
17. Hydrops Fetalis.
18. How to perform a full Anomaly Scan.
19. How to locate & Assess Placenta & Adherent Placenta.

Practical Training Program

Module One: Fetal Anatomy & Abnormalities

1. Cross Movement.
2. AFI, MVP.
3. Placenta, Position Related to Cervix, Signs of Adherentce.
4. Trans Thalamic View.
5. Trans Ventricular View.
6. Trans Cerebellar View.
7. BPD.
8. HC.
9. TCD.
10. Post Horn of Lateral Ventricles.
11. Measures of Brain Hemisphere.
12. CM.
13. Face Profile.
14. Coronal View of The Face.
15. Axial View of The Face.
16. Vertebral Column Saggital View.
17. Vertebral Column Transverse View.
18. Vertebral Column Coronal View.
19. AC.
20. Kidneys Transverse View.
21. Kidneys Saggital.
22. Insertion of Umbilical Cord.
23. 3 Vessels of Umbilical Cord.
24. Urinary Bladder.
25. Femur Rt & Lt.
26. Humerus.
27. Leg: Tibia & Fibula Rt & Lt.
28. Forearm: Radius & Ulna Rt & Lt.
29. Hand & Counting Fingers.
30. Foot & It's Angle to Leg.
31. Gender.

Module Two: Doppler, 3/D & 4/D The Doppler:

1. Physics of Doppler.
2. Umbilical artery Doppler.
3. Middle Cerebral Artery Doppler.
4. Ductus Venosus.
5. Doppler Ultrasound in Diagnosis & Management of IUGR
6. Doppler & Multiple Gestations.
7. Doppler Velocimetry in Maternal Allo-Immunization

The 3/D & 4/D:

1. Basics of the 3/D & the 4/D Ultrasound.
2. The 3/D Rendering Volume.
3. The Volume Contrast Imaging (VCI).
4. The Orthogonal mode, Tomographic mode, Surface mode, Rendering & HD-Live, Maximum mode Rendering, Minimum mode, Inversion mode, Silhouette tool.
5. The 3/D of the Fetal Skeleton.
6. The 3/D of the Fetal Face.
7. The 3/D in Early Pregnancy.

Practical Training Program

Module Two: Doppler & 3D

1. Doppler Physics (PRF, Angle, Base Line).
2. Doppler Indices (PI, RI, S/D, CPR & PSV).
3. Umbilical A. Doppler.
4. Middle Cerebral A. Doppler.
5. Uterine A. Doppler.
6. Ductus Venosus.
7. Orthogonal Planes, Multiplanner Mode, Rendering, Surface.
Mode, Maximum Mode & Minimum Mode.
8. VCI, Omni View.
9. Tomographic Mode.
10. Magicut.

Module Three: Gynecology Ultrasound

1. Selection & set up of the U/S machine to ensure safe & optimal use to include appropriate probe selection & orientation.
2. Accurate measurement of the Endometrium in the accepted Sagittal Plane.
3. Assessment of the Adnexal regions: accurate identification of the normal Ovaries, normal Fallopian tubes, normal Pelvic Fluid.
4. Accurate measurement of normal & abnormal Adnexal Structures: The Mean Diameter & Volume.
5. How to recognize & evaluate common Endometrial & Myometrial Abnormalities.
6. International group of Endometrial Tumor Analysis (IETA).
7. Ultrasonography & Adenomyosis.
8. Ultrasonography of the Cervix.
9. How to recognize & evaluate common Ovarian Abnormalities.
10. How to recognize & evaluate complex Ovarian Masses & when to refer appropriately.
11. International group of Ovarian Tumor Analysis (IOTA).
12. IDEA (international Deep Endometriosis Analysis).
13. Ultrasonography & Infertility.
14. Doppler Applications & uses in Gynecology.
15. Introduction to 3/D Ultrasound applications in Gynecology.
16. Proper patient communication.
17. Producing proper written summary & the interpretation of results.
18. Issue structured written report.
19. Arranging appropriate follow up or intervention among a multi-disciplinary team.

Practical Training Program

Module Three: Gynecological Ultrasound

1. Uterus (Length, Anteroposterior, Transverse). Identification of Endometrium, Myometrium & Parametrium.
2. Cervical Length.
3. Endometrial Thickness.
4. Recognize and Evaluation of Common Endometrial & Myometrial Pathology.
5. Ovarian Volume (Length, Height, Width).
6. Folliculometry & Sonohystography.
7. Recognize & Evaluate Common Ovarian Pathology.
8. Uterine Artery Doppler.
9. 3D Of Uterus to Differentiate Between Different Uterine Anomalies & Pathologies.
10. Sonohystography.
11. 4D sonohystography.

Module Four: Fetal Echocardiography

- 1- Introduction of fetal echocardiography
- 2- Normal four chamber view
- 3- Abnormal for chamber view
- 4- Normal outflow tracts views
- 5- Abnormal outflow tracts views
- 6- Normal three vessels view
- 7- Abnormal three vessels view
- 8- Doppler in fetal echocardiography

Practical Training Program

Module Four: Fetal Echocardiography

1. Heart Size, Site, Structure, Position.
2. Four Chamber View.
3. Rt Outflow Tract.
4. Lt Outflow Tract.
5. 3 Vessel View.
6. Bicaval View.
7. Aortic Arch View.
8. Ductal Arch View.
9. Doppler of the Heart.
10. F.H.R (M mode, Doppler).

Module Five: First Trimester Ultrasound

1. First comes first: Brain storming & the Scanning Standards.
2. Safe use of the U/S machine & the correct settings.
3. Probe orientation, probe care & infection control (Trans-Abdominal & Trans- Vaginal routes).
4. Confirmation of the True Intrauterine Location of Pregnancy.
5. Detection of Fetal Cardiac Activity & Embryonic Viability.
6. Measurement of Gestational Sac Diameter & Crown Rump Length.
7. Exclusion of Early Visceral, Somatic or Morphologic defects.
8. Nuchal Translucency Scan & Screening for Trisomies & the Genetic Ultrasound.
9. Doppler applications & uses in Early Pregnancy.
10. Ectopic Pregnancy.
11. C.S. Scar Pregnancy.
12. Gestational Trophoblastic Diseases.
13. Accurate Documentation of Measurements.
14. Producing proper written summary & interpretation of results, along with final reporting.
15. Communicating normal or abnormal results to parents.
16. Arranging appropriate follow up or intervention among a multi-disciplinary team.

Practical Training Program

Module Five: First Trimester Ultrasound

1. CRL.
2. NT.
 - a. Nosal Bone.
3. Tricuspid Valve Doppler.
4. F.H.R.
5. D.V.
6. How to measure risk assessment for chromosomal anomalies.

Module Six: Interventional Ultrasound

1. Amniocentesis.
2. Chorionic Villous sample.
3. Cell Free Fetal DNA.
4. Intrauterine Blood Transfusion.
5. Fetal Infection.
6. Fetal Reduction.
7. Fetal Surgery.
8. Aspiration of an Ovarian Cyst.

Practical Training Program Module Six: Interventional Ultrasound

Simulator training on Amniocentesis, Chorionic villus sample, intrauterine blood transfusion, aspiration of ovarian cyst and fetal reduction.



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