

Simulation based training for fetal interventions - preliminary experience

Asma Khalil, Renato Xiemens, Smriti Prasad, Nashwa Eltaweel, Rogelio Cruz Martinez

Fetal Medicine Unit, St George's University Hospital, London, UK; Vascular Biology Research Centre, Molecular and Clinical Sciences Research Institute, St George's University of London, London, UK; Director, FMFLA, Latin American Fetal Medicine Foundation University hospital of Coventry and Warwickshire; Fetal Medicine and Surgery Center, Medicina Fetal Mexico, Queretaro, Mexico

INTRODUCTION

- Fetal interventions can be basic or advanced
- Procedures are infrequent, long learning curve
- First fetoscopic simulation course in the UK/Europe
- Simulation models have been used in obstetrics – PROMPT

STRUCTURE OF THE COURSE

Eligibility: Trainees undertaking maternal fetal medicine module
Obstetricians practicing fetal medicine
Limited to 15 participants

Duration: 2 days

Day 1 – Basic diagnostic procedures

Day 2 – Advanced therapeutic procedures

Delivery: Hybrid approach

Flexible – depending on training desired

Theoretical lectures followed by hands on practice

Faculty: Fetal therapy experts from UK and Brazil

Incentive: Trainees from UK and LMIC settings, discounted prices

Models: High fidelity simulation models for amniocentesis, chorionic villus sampling, fetoscopic laser ablation, fetoscopic cord occlusion, fetoscopic spina bifida repair and FETO for diaphragmatic hernia

Assessments: Multiple choice question-based assessment, followed by feedback and certificates.

GLIMPSES OF THE COURSE



FEEDBACK

100% attendees mentioned - course will change their practice

92% stated - course was value for money

90% stated - quality of simulators was excellent



"Different approach altogether for beginner like me to learn fetoscopic procedures."

"I would recommend this course to colleagues"

"Highly appreciated"

"Virtual simulator is the best thing to practice which I never imagined I could do online."

CONCLUSION

- ✓ Simulation training is particularly valuable for infrequent and risky procedures as those performed on the fetus.
- ✓ Low-cost, self-assembled and recyclable simulation models can be used for acquirement of core skills in fetal invasive procedures
- ✓ Well received and excellent feedback – second edition was organized within 3 months of this pilot project.