

Materials List for:

Model Surgical Training: Skills Acquisition in Fetoscopic Laser Photocoagulation of Monochorionic Diamniotic Twin Placenta Using Realistic Simulators

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Materials

| Name | Company | Catalog Number | Comments |
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| Fetoscopic Simulator | Maternal-Fetal Medicine unit, Department of Obstetrics and Gynaecology, Siriraj Hospital, Bangkok, Thailand | NA. | Siriraj Fetoscopic Simulator. Customised model of monochorionic anterior/posterior placenta and anastomoses produced at the Siriraj Hospital in Bangkok. |
| Laparoscopy tower with light source, camera and video recorder | Olympus Singapore | Olympus Visera Elite system (Olympus Singapore) with camera OTV-S190 and light source CLV-S190 set at medium intensity (level 0) and video recorder | Laparoscopy tower for fetoscopy and recording of practice |
| Voluson E8 ultrasound machine with 4CD probe | GE Healthcare Singapore | GE Voluson E8; transabdominal 4CD curved transducer (2-5MHz) | Ultrasound system for guidance of fetoscope introduction and manipulation |
| Miniature straight forward telescope 0° (2mm) for posterior placenta | KARL STORZ GmbH & Co KG, Tuttlingen, Germany | 11630AA | Fetoscope. 0° lens, diameter 2mm, length 26cm, autoclavable, fibre optic light transmission incorporated. To use with operating sheath 11630KF. |
| Operating sheath, straight with pyramidal obturator. | KARL STORZ GmbH & Co KG, Tuttlingen, Germany | 11630 KF | Size 9 Fr with working channel 1 mm, for use with 11630AA; working channel for laser fibres up to 400µm core. |
| Multichannel miniature straight forward telescope 0° set straight for posterior placenta | KARL STORZ GmbH & Co KG, Tuttlingen, Germany | 11506AAK | Fetoscope. 0° lens, diameter 3.3 mm, length 30cm, 30,000 pixels, integrated channels, autoclavable, fibre optic light transmission incorporated. |
| Multichannel miniature straight forward telescope 0° set curved for anterior placenta | KARL STORZ GmbH & Co KG, Tuttlingen, Germany | 11508AAK | Fetoscope. 0° lens, diameter 3.3 mm, length 30cm, 30,000 pixels, integrated channels, autoclavable, fibre optic light transmission incorporated. |
| Dornier diode laser with 400µm or 600µm laser fibre | Medilas D Multibeam, Dornier MedTech Asia, Singapore | S/N D60-353 | Laser photocoagulation system. Diode (30-60 W) |
| Laser fibre | 400-600µm laser fiber | Disposable LG type D01-6080-BF-0; LOT 1024/0613 | Use the provided ceramic cutter to refashion the tip of the fibre once coagulated after burning to maintain the sharp focus of the laser. |

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| Large plastic container with ultrasound transparent skin; | NA | NA. | Container is a simple household item with a watertight lid that can be locked in place. The silicon rubber "skin" produced inhouse allows US visualisation of the placenta within the container. Can be used as a simulator for vascular laser coagulation. |
| Pig bladder and small mid-gestation placenta | NA | NA. | Obtained from the local butcher. Elastic tissue that can be stretched when filled with large volume of fluid; can incorporate a small human/NHP placenta and used as a simulator for laser coagulation |