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Ultrasound Epidural & Lumbar Puncture Model, Light

Item No.	ALT61002
Weight	
Make:	Adam, Rouilly Limited, UK

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SKU:

Categories: Ultrasound





Product Description

The Ultrasound Epidural & Lumbar Puncture trainer is designed to aid training in real-time ultrasound guided procedures. The Limbs & Things ecolucent material has been thoroughly tested to ensure its acoustic properties offer an experience as close to human tissue as possible*. and is compatible with most commercial ultrasound machines. Augmented Reality is now part of the Lumbar Puncture range.

Skills Gained

- Performing procedures in a sitting and left lateral position
- Identifying the iliac crests
- Identifying landmarks under ultrasound – spinous processes, interspinous space and facet joints

- Pre-puncture ultrasound mark up on the injection site
- Real time ultrasound guided injection
- Administering of local anaesthetic injections
- Administering of therapeutic treatments, e.g. antibiotics or chemotherapy medication
- Administration of an epidural
- Collection and measurement of cerebrospinal fluid
- Anatomy:
    - Palpable sacrum
    - Iliac crests
    - Lumbar vertebrae between L2 and L5 with spinous processes
- Spinous processes and Facet joints are visible under ultrasound
- Ultrasound inserts can be used to practice marking landmarks
- Multi-purpose stand allows for practice in both standing and left lateral positions
- The Limbs & Things ecolucent material has been thoroughly tested to ensure its acoustic properties offer an experience as close to human tissue as possible and is compatible with most commercial ultrasound machines – human tissue has: a wave speed of 1540-1620ms & attenuation co-efficient of 0.5-5Mhz, Limbs & Things Ultrasound material has a wave speed of 1600ms & attenuation co-efficient of 2Mhz
- As both a Lumbar Puncture and Epidural trainer, this model can be used to teach:
    - Loss of resistance technique
    - Paramedian approach
    - Threading an epidural catheter
    - Administering fluids
- Simulated Patient: this product can be used with a simulated patient to develop communication skills
- NEW: Augmented Reality capabilities with the ART Mat
- The new ART Mats combine real world MRI and CT scan data, with the skills of talented medical artists and digital creators, to bring the internal anatomy of our trainers to life
- Within the Limbs & Things ART app’s digital environment, you can move around your task trainer and view various overlays, including: the musculature, organs and vessels, and skeletal structure
- The app’s interface allows you to move seamlessly between the layers, as well as view their cross sections
- Students are also able to view digital procedures in the AR environment to see how the procedure is done, and its impact on the patient’s anatomy
- Durable lumbar tissue insert and duras are longer lasting, increasing life span and keeping on going costs down
- Simulator gives a distinctive “pop” feeling when puncturing the dura during an ultrasound guided lumbar puncture procedure
- Needle insertion possible between vertebrae
- Ability to feel when the dura is punctured during lumbar puncture

- Realistic rate of cerebrospinal fluid (CSF) can be simulated
- All epidural and lumbar puncture inserts are compatible with the common base
- Skin and duras can be rotated to extend their life span and ensure cost effective training
- The stand provided allows for training in left lateral and sitting positions

Includes

- Torso with Torso Skin
- Epidural & Lumbar Puncture Stand
- ALT61022 Water Reservoir
- ALT61014 Epidural & Lumbar Puncture Ultrasound Insert, Light
- ALT61017 Epidural & Lumbar Puncture Standard Dura (Pack of 2)
- ALT61018 Epidural & Lumbar Puncture Advanced Dura (Pack of 4)
- ALT61019 Epidural & Lumbar Puncture Iliac Crest Insert
- ALT61020 Epidural & Lumbar Puncture Insert Cartridge
- Marker Pen
- ALT60130 ART Mat for Lumbar Puncture

Not included

- Spinal needles
- Manometer
- Epidural kit
- Large curvilinear probe
- Ultrasound gel

Cleaning & Safety

- Drain all fluid from the product when not in use
- Clean lumbar puncture trainer with a damp cloth, using warm water and mild detergent
- Allow trainer to completely dry before storing
- This product is latex free
- Use gloves while using the Ultrasound Epidural and Lumbar Puncture trainer
- Wash hands thoroughly after handling the Ultrasound insert
- Please note: Fat Pads and Skin Pads are replacement parts for the palpation modules only, they are not compatible with ultrasound
- When marking up the ultrasound block, it is recommended to only use the supplied marker pen

Why Choose the Ultrasound Epidural & Lumbar Puncture Model – Light for Your Simulation Lab in India?

The Ultrasound Epidural & Lumbar Puncture Model – Light (Item No. ALT61002) by Limbs & Things, distributed by Adam Rouilly Limited, UK is a comprehensive real-time ultrasound-guided epidural and lumbar puncture training model — the most advanced combined epidural/LP simulator in the catalogue, adding ultrasound guidance, Augmented Reality (AR), and a dual-position stand to the procedural skill set that conventional epidural and LP simulators train. For anaesthesiology training programmes, pain management training, obstetric anaesthesia courses, neurology residency programmes, and NMC-mandated simulation labs in India that need to train ultrasound-guided needle placement alongside traditional landmark-based technique, this model is the complete platform for the full modern epidural and LP training curriculum.

The model's ecolucent Limbs & Things material has been rigorously tested for acoustic fidelity — wave speed 1600 m/s and attenuation coefficient of 2 MHz, closely matching the human tissue range of 1540–1620 m/s and 0.5–5 MHz — and is compatible with most commercial ultrasound machines available in India. Palpable anatomy includes iliac crests, sacrum, and lumbar vertebrae between L2 and L5 with spinous processes; spinous processes and facet joints are visible under ultrasound, enabling pre-puncture ultrasound mark-up on the injection site exactly as in clinical practice. The multi-purpose stand supports training in both sitting and left lateral positions. For epidural training, the model covers loss-of-resistance technique, paramedian approach, threading an epidural catheter, and administering fluids. For lumbar puncture, the model gives a distinctive "pop" when the dura is punctured, enables realistic CSF flow simulation, and includes both Standard and Advanced Dura inserts for progression from basic to complex scenarios. The Augmented Reality ART Mat — included in the set — uses real MRI and CT scan data to overlay the internal anatomy of the trainer digitally, allowing trainees to view musculature, organs, vessels, and skeletal structure through the Limbs & Things ART app and to watch digital procedure demonstrations in AR before performing the physical procedure.

Includes: Torso with Torso Skin, Epidural & Lumbar Puncture Stand, Water Reservoir (ALT61022), Epidural & Lumbar Puncture Ultrasound Insert Light (ALT61014), Standard Dura pack of 2 (ALT61017), Advanced Dura pack of 4 (ALT61018), Iliac Crest Insert (ALT61019), Insert Cartridge (ALT61020), Marker Pen, ART Mat for Lumbar Puncture (ALT60130). **Not included:** spinal needles, manometer, epidural kit, large curvilinear probe, ultrasound gel.

Why Buy from SEM Trainers? SEM Trainers & Systems is an authorized distributor of Adam Rouilly / Limbs & Things products in India with over 30 years of experience supplying medical simulators to 1,500+ institutions across 28 states. We provide pan-India delivery, on-site installation, faculty orientation, and dedicated

after-sales support.

Q: Does this model require a specific ultrasound machine?

A: No — the ecolucent material is compatible with most commercial ultrasound machines. Ultrasound gel and a large curvilinear probe are required but not included.

Q: What does the Augmented Reality ART Mat add? A: Real MRI/CT-based digital overlays of musculature, organs, vessels, and skeletal structure through the Limbs & Things ART app — trainees can view digital procedure demonstrations in AR before performing the physical procedure.

Q: Can both sitting and left lateral patient positions be trained? A: Yes. The included multi-purpose stand allows practice in both sitting and left lateral positions on the same model.

Manufacturer

Limbs & Things