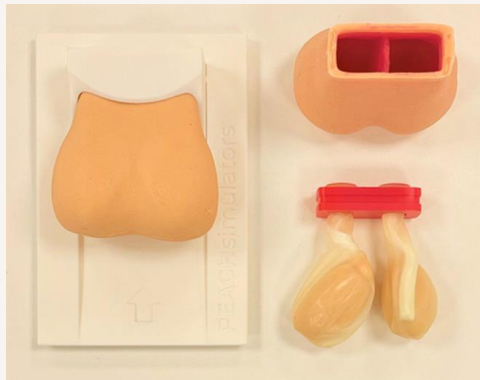




PRODUCT DESCRIPTION

Testicular torsion is a time-critical urological emergency. Developed through research at King's College London, this anatomically informed simulator enables trainees to rehearse scrotal exploration, testicular delivery, recognition and correction of spermatic cord torsion, and bilateral orchidopexy in a controlled, patient-safe environment.



Modular simulator system

Reusable scrotal housing with replaceable testis-spermatic cord units

KEY FEATURES

- ✓ Layered scrotal wall with integrated tunica vaginalis, testis, epididymis and spermatic cord
- ✓ Controlled torsion, detorsion and orientation changes through an integrated cord mechanism
- ✓ Compatible with standard surgical instruments for incision, dissection, suturing and knot tying
- ✓ Anatomically informed design developed from imaging, literature and clinical input
- ✓ Replaceable testis-spermatic cord operative units; durable scrotal housing is retained for reuse

WHAT CAN BE PRACTISED

- Scrotal incision and exploration
- Testicular delivery and detorsion
- Affected and contralateral orchidopexy

TRAINING SETTINGS

- Urology boot camps
- Skills workshops and teaching days
- Classroom or office-based practice

EDUCATIONAL VALUE

- Repeated practice without patient risk
- Standardized delivery across learners
- Reduced reliance on animal tissue and wet labs

TECHNICAL SPECIFICATIONS

Anatomy: Scrotal wall; tunica vaginalis; testis; epididymis; spermatic cord

Torsion mechanism: Integrated cord mechanism

Operative units: Replaceable testis-spermatic cord units

Housing: Durable, reusable scrotal housing

Instrument compatibility: Standard surgical instruments

Design basis: Imaging, literature and clinical input

INTENDED TRAINING APPLICATION

- Scrotal incision and exploration
- Testicular delivery and detorsion
- Recognition and correction of spermatic cord torsion
- Affected testis orchidopexy
- Contralateral orchidopexy
- Suturing and knot tying with standard surgical instruments

USAGE AND LIFESPAN

REUSABLE SCROTAL HOUSING

Durable housing for repeated training.

REPLACEABLE OPERATIVE UNITS

Replaceable testis-spermatic cord units.

STANDARD INSTRUMENTS

Uses standard surgical instruments.

EVALUATION AND VALIDITY EVIDENCE

Participant evaluation against a traditional bull testis training model included 85 participants (66 trainees, 19 trainers) across 3 countries. Outcomes are participant-reported; transfer to live operative performance has not been assessed.

91%

SAFE DETORSION

Useful for practising safe testicular detorsion.

92%

ORCHIDOPEXY

Useful for orchidopexy of the affected testis.

4.33 / 5

TRAINING VALUE

Median overall training-value score.