MISS Curriculum

Introduction

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AOSpine MISS curriculum task force        July 2019
Why is it needed

Background

• MISS attracts increasing interest
• Studies show many advantages over conventional surgery
• Different opinions and experiences
• Identified high need for surgeon’s training in these procedures and techniques
• Received a high demand within our network in all regions through the needs assessment in 2017
Minimally invasive spine surgery (MISS) is a suite of technology-dependent techniques and procedures that reduces local operative tissue damage and systemic surgical stress enabling earlier return to function striving for better outcomes than traditional techniques.

AOSpine MISS Curriculum Task Force, May 3, 2018 (Singapore)
5 T’s

**Target**
Right patient leads to right operation technique

**Tools and Technology**
Access, Microsurgery, Navigation — Instruments:

**Techniques**
Skills and 3 surgical principles
- Unilateral approach for bilateral decompression
- Preserve stability
- Indirect decompression

**Teaching and Training**
MISS curriculum

**Testing the boundaries**
Research
The Curriculum

- Best way to teach technology is to go from “simple” → “complex”
- Best opportunity to convey the knowledge of MISS to surgeons globally.
- Curriculum → effective way to put together your courses and maximize the educational benefit for the participants
Curriculum Framework

8 General skills – available preparation material

The following material is available and can be integrated according to participant’s knowledge in your event program:

- Using a microscope
- Using an endoscope
- Using a burr with an endoscope
- Using a burr in MISS
- Using 2-D and 3-D navigation and assistive technologies
- Managing a dural tear
- Bleeding control
- Radiation reduction
Curriculum Framework

4 Microscopic procedures

- Interlaminar microscopic tubular lumbar discectomy (IMTLD)
- Posterior microscopic tubular cervical foraminotomy (PMTCF)
- Extraforaminal microscopic tubular lumbar discectomy (EMTLD)
- Microscopic tubular unilateral laminotomy for bilateral decompression (MT-ULBD)
3 Endoscopic procedures

- Interlaminar endoscopic lumbar discectomy (IELD)
- Transforaminal endoscopic lumbar foraminotomy and discectomy (TELF/TELD)
- Lumbar endoscopic unilateral laminotomy for bilateral decompression (LE-ULBD)
Curriculum Framework

2 Instrumented procedures

- Percutaneous screw and rod placement
- MISS TLIF
Task force members

Whom to contact in your region

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Where to go

AOSpine website: www.aospine.org/MISScurriculum

Resources for Faculty: Faculty Lounge

MISS Curriculum

A pathway for surgeons to follow into minimally invasive spine surgery

Curriculum framework

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AOSpine MISS Curriculum Task Force May, 2018