

## Dynamic Interspinous Process U Fixation. An Alternative Surgical Treatment for Degenerative Lumbar Instability

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1985: Neurosurgeon at the Neurosurgical  
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### Member of following Specialist Societies

- SBNC Belgian Society of Neurosurgery
- SNCLF Society of French Speaking Neurosurgeons
- SFNCR Société Francophone de Neurochirurgie du Rachis
- Spine Arthroplasty Society
- EANS European Association of Neurosurgeons
- Société des Neurochirurgiens de l'Est (France)
- Neurosciences (Luxembourg)

### European Activities

- Secretary EANS Examination Committee (European Board Examination)
- National delegate at the European Union Medical Specialists

Painful instability (dyskinesia) during degeneration process of the lumbar disco-articular tripod is classically treated by immobilisation, fusion with or without instrumentation. This non reversible procedure suppresses segmental motion with a future risk of junction syndrome above fusion. Large decompression surgery without fusion further destabilises a latent unstable segment leading to bio-mechanical failure and chronic pain (failed surgery). A more conservative lumbar recalibration technique seems indicated, with a dynamic interspinous process Fixation (U fixation), allowing a controlled range of motion in flexion-extension and rotation, but suppressing dyskinesia.

Surgical technique is quick and simple through a muscle-sparing midline approach, avoiding wide lateral exposure and pedicle screwing. Even the smaller S1 process can be instrumented with some technical refinements. Indications concern degenerative discopathy and recurrent DH with instability, degenerative canal stenosis (soft and osseous) and junction disease (curative or preventive). Bad bone conditions, kyphosis and unstable degenerative antelsthesis are relative contraindications. Pitfalls may need implant removal or stabilisation by internal fixation. Early experience in 50 patients with follow-up from 3 to 12 months seems promising in terms of controlling pain and function. U fixation may limit indications for rigid fixation and fusion systems in this patient group difficult to treat.

### Special Interests

- Spinal instrumentation, including cervical and lumbar interbody cage fusion, dynamic neutralisation systems, disc prosthesis
- Neurosurgical treatment of spasticity, including Baclofen pump in adults and children
- Microvascular surgery, including carotid endarterectomy
- European Affairs, mainly neurosurgical education and examination