## ROTAIO



Características generales

Prótesis Discal Cervical

Funcional como un disco intervertebral - implantable como una caja intersomática

Adaptación perfecta a la anatomía del cuerpo

Colocación segura antes del borde posterior

Igual al eje de movimiento de un disco sano

Traslación completamente independiente de la rotación

Movimiento libre, limitado sólo por la fisiología articular

Diseño en una pieza

Dentado igual al de las cajas intersomáticas

Pre-ensamblada, en embalaje estéril

No requiere ensamblaje laborioso

Lista para el uso

Ventajas

Mantenimiento de la movilidad

Técnica quirúrgica estándar

Fijación sin quilla

Indicaciones

Discopatía

Prolapso discal

Foramen y estenosis del canal espinal

The completely new designed ROTAIO cervical disc prosthesis is now available. All mechanical tests were performed with outstanding results.

## Proven mechanics

Life is the hardest test. Everyday activities, sport, extreme stresses such as might occur during a fall – the cervical spine is exposed to constantly varying demands in daily life. A disc prosthesis must be equally capable of reliably meeting these requirements.

Therefore, ROTAIO has undergone an exceptionally extensive series of cyclic, dynamic and static tests. The studies required for registration were supplemented by further tests to understand the performance of the ROTAIO disc prosthesis as much as possible. These included loading conditions based on the actual loads on the cervical spine in order to draw direct conclusions about the mechanical safety of ROTAIO in the patient.

Nodding, shaking one's head, looking up at the sky – a cervical disc prosthesis should allow one to enjoy the full range of life's activities. This is one reason why the use of disc replacements that preserve movement has become increasingly established in recent years as an alternative to fusion (ACDF).

But merely preserving movement in the decompressed segment is not enough: Postoperative neck pain and disproportionate stresses on the facet joints have been described repeatedly following cervical disc arthroplasty. To achieve a high quality of movement, disc prostheses must therefore replicate the natural pattern of movement of a disc as precisely as possible. Thus, ROTAIO offers not only rotation, flexion/extension and lateral flexion, but also the possibility of uncoupled translation. In this way, ROTAIO optimally reproduces the natural centre of rotation and thereby provides physiological, facet-guided, segmental movement.

ROTAIO is implanted «in one piece» with no additional preparative steps. The posteriorly-oriented prosthesis design enables it to be securely positioned anterior to the posterior wall of the vertebral body and makes the implantation of ROTAIO comparable with that of a cage.

The aim of ROTAIO is to replicate the natural movement of a healthy disc. The solution: a variable centre of rotation, enabling physiological facet-guided movement. This ensures that the emphasis is not merely on maintaining movement, but in particular on the quality of movement of a natural disc. However complex the joint kinematics of ROTAIO, the surgical technique nevertheless remains simple.

ROTAIO is implanted by the 'gold-standard' Smith-Robinson technique as a single component without additional preparative surgical steps. ROTAIO can therefore be described in a single phrase: Implantable like a cage – moves like a disc.

Información al paciente: http://www.rotaio.de/fileadmin/pdf/rotaio-pf-en-web.pdf

Signus Medizintechnik

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