Tailored Solutions for Pelvic Floor Surgery

Expert Technologies in PVDF

Male Urinary Stress Incontinence
Application

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<th>Male Urinary Stress Incontinence:</th>
<th>Position</th>
<th>Access</th>
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<td>DynaMesh®-PRM</td>
<td>- suburethral</td>
<td>- The implant is placed transobturatorically in outside-in technique.</td>
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DynaMesh®-PRM mesh implants are specially developed for the transobturatoric suburethral sling operation for the treatment of male stress urinary incontinence in light and medium heavy cases. The unique selvedges of DynaMesh®-PRM ensure a simple and atraumatic thread in and adjustment without irritating the surrounding tissue. The dimensional stable textile structure of polyvinylidene fluoride (PVDF) monofilaments with an outstanding effective porosity guarantees an excellent tissue growing-in.

The surgeon selects the method of surgery and final position of the sling depending on her/his preference and the instruments being used. These instruments are procured separately.

Normally, the mesh implant is inserted through a perineal access. The bulbospongious muscle is divided in the midline and the urethral bulb is detached from the fibrous nucleus until the urethral bulb is mobile. The tape is inserted transobturatorically with a tunneler. The central mesh part is fixed to the mobile part of the urethral bulb using sutures. Tension on the tape draws the bulb in a cranial direction in the retrourethral space. When the tape is finally in position, a tunnel is formed with an overholt from the perineal wound to the incision site. The ends of the tape are pulled back and cut off at the level of the wound edges. To prevent the tape being displaced in the first weeks of wound healing, the ends of the tape are loosely tied together using a size 2-0 medium-term absorbable suture.

The user must be familiar with the technique involved in implanting a suburethral sling before fitting a DynaMesh®-PRM.

Optimal Textile Construction

DynaMesh® implants convince by their highly developed textile structure.

Atraumatic implant selvedges

DynaMesh®-PRM implant is not cut from a flat mesh. For this reason the smooth selvedges ensure a simple and atraumatic threading through the tissue and adjustment without irritating the surrounding tissue (no „saw teeth”).
**Excellent Material: PVDF**

**Reduced Bacterial Adherence**
During a recent investigational study of the University Hospital Aachen cultures of microbial strains of relevant germs have been given onto different mesh material. The fluorine essence measure afterwards showed a marginal quantity of germs adhering on meshes made from pure PVDF. The risk of infection considerably decreases at reduced bacterial adherence. ¹⁵

**High effective porosity**

The optimal warp knitted structure of DynaMesh⁶ leads to high effective porosity. This secures an excellent incorporation and considerably reduces foreign body reaction. The elasticity of the implant is postoperatively maintained. ⁶

**No curling up with DynaMesh⁶-PRM**

High form stability at defined elasticity

The dynamometry is exactly adjusted to the fields of application. At defined elasticity, they are stable enough to perfectly strengthen the anatomical structures and to shrink minimally only. ²

Especially under tension the high effective porosity persists because the mesh only stretches (in a defined way) lengthwise while width does not change. ¹ ³ ⁴

**Superior Ageing Resistance**

After many years of application in various surgical disciplines the high performance polymer PVDF has proven its worth compared to PP: Enduring high preservation of surface integrity and fibre stability leading to long term patient safety. ³ ⁷ ⁸

**Less Foreign Body Reaction**

The minimized foreign body reaction reliably prevents from bridging leading to highest patient comfort. ⁶

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* Source: University Clinic and University of Applied Sciences, Aachen
Technical Data

DynaMesh®-PRM

Material: 100% polyvinylidene fluoride monofilament
Tension force: 0 kg - 2 kg
Pore size: 1.1 mm x 1.3 mm - 1.0 mm x 1.4 mm
Effective porosity: 59.7% - 61.6%
Width of sling: 11 mm - 10.5 mm

References:
1) Göretzlehner, U.: „PVDF as an implant material in urogynaecology“ (BIOmaterialien, 2007, German language)
5) Klosterhalfen, B., Institute of Pathology, Hospital Düren, Junge, K., and Klinge, U., University Hospital Aachen “Comparison of bacterial adherences” (2010)
6) Klosterhalfen, B., Institute of Pathology, Hospital Düren “Foreign Body Reaction” (2010)
8) Laroche, G. et al. „Polyvinylidene Fluoride Monofilament Sutures: Can they be used safely for long-term anastomoses in the thoracic aorta?” (International Society of Artificial Organs, 1995)

Delivery Program

DynaMesh®-PRM 04 cm x 03 cm PV330453F1 Unit = 1 pc.
DynaMesh®-PRM visible 04 cm x 03 cm PV730453F1 Unit = 1 pc.

Reusable Instruments:
Made from medical grade stainless steel

DynaMesh®-IST03 Surgical instrument d 5 cm REF IST03F1 Unit = 1 set (l + r)
DynaMesh®-IST01 Surgical instrument d 6 cm REF IST01F1 Unit = 1 set (l + r)
DynaMesh®-IST02 Surgical instrument d 7 cm REF IST02F1 Unit = 1 set (l + r)

www.dyna-mesh.com

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