Biodesign® Rectopexy Graft

Systematic review finds lower mesh-related complication rates with biologic versus synthetic mesh in ventral mesh rectopexy[1]

Systematic review and meta-analysis

Complication risk

4,763 patients

11 studies

Mesh material	Number of patients	Mesh-related complications
Biologic	762	0.7%
Synthetic	4,001	2.4%

0.7%
MESH-RELATED COMPLICATIONS
with biologic material

Recurrence risk

2,973 patients

29 studies

Mesh material	Number of patients	Recurrence risk	Cumulative recurrence
Biologic	602	15.4%	5.8%
Synthetic	2,371	18.8%	6.1%

5.8%
RECURRENCE RATE
with biologic material

This systematic review and meta-analysis reviewed the current literature on mesh-related complications and recurrence after ventral mesh rectopexy (VMR) with synthetic or biologic mesh.

BIODESIGN® RECTOPEXY GRAFT

Ventral mesh rectopexy (VMR) is a widely accepted surgical treatment option for rectal prolapse. Both synthetic and biologic mesh are used, but no consensus exists on the preferred mesh type. The aim of this systematic review and meta-analysis was to establish an overview of the current literature on mesh-related complications and recurrence after VMR with synthetic or biologic mesh to aid evidence-based decision-making in choosing a mesh material.

Mesh-related complications

Eleven studies reported on mesh-related complications. Together, these studies included 4,001 patients treated with synthetic mesh and 762 treated with biologic mesh. The incidence of mesh-related complications ranged between 0–2.4% after synthetic VMR versus 0–0.7% after biologic VMR. Synthetic mesh studies showed a pooled incidence of mesh-related complications of 1.0% (95% CI 0.5–1.7). Data from biologic mesh studies could not be pooled.

Recurrence

Twenty-nine studies reported on post-operative recurrence. Together, these studies included 2,371 synthetic mesh patients and 602 biologic mesh patients. Incidence of recurrence varied from 1.1–18.8% for synthetic VMR versus 0–15.4% for biologic VMR. Cumulative incidence of recurrence was found to be 6.1% (95% CI 4.3–8.1) and 5.8% (95% CI 2.9–9.6), respectively. The clinical and statistical heterogeneity were high.

The Biodesign Rectopexy Graft is approved for use in multiple jurisdictions. Indications for use vary regionally (see below). Please refer to the product's Instructions for Use (IFU) for full prescribing information.

Australia
The Biodesign Rectopexy Graft is intended to support/reinforce soft tissue in surgical procedures for open and laparoscopic repair of rectal prolapse/rectal intussusception. This device is not to be used via a transvaginal approach.

Europe
The Biodesign Rectopexy Graft is intended to support/reinforce soft tissue in surgical procedures for open and laparoscopic repair of rectal prolapse/rectal intussusception.

United States
The Biodesign Rectopexy Graft is intended to reinforce soft tissue where weakness exists in the gastroenterological anatomy including transabdominal repair of colon and rectal prolapse.

1. van der Schans EM, Boom MA, El Moumni M, Verheijen PM, Broeders IAMJ, Consten ECJ. Mesh-related complications and recurrence after ventral mesh rectopexy with synthetic versus biologic mesh: a systematic review and meta-analysis. *Tech Coloproctol*. 2022;26(2):85–98.