

IS OBSTRUCTION OF ILEAL CONDUIT AFTER PARASTOMAL HERNIA REPAIR
WITH PORCINE DERIVED TISSUE MATRIX STRATTICE™ A VALID CONCERN?

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Introduction

Parastomal hernia occurs in 17% of patients with ileal conduit and recurrence following hernia repair occurs in 27-50% of cases.

Strattice™ mesh is a porcine derived tissue matrix which is used in hernia repair as an alternative to synthetic mesh.

The introduction of Strattice™ mesh has been reported to have better surgical outcomes when used in colorectal practice, with a reduction in hernia recurrence, whilst increasing the incidence of post-operative seroma.

Aim

To review the outcomes of Strattice™ mesh use in the repair of ileal conduit related parastomal hernias to see if the benefits of using it translates into urological practice.



Method

Retrospective review of notes of all with ileal conduits having repair of hernia with Strattice™ mesh in our department, at University College London Hospital, between January 2012 and September 2017.

Parastomal hernia repairs were performed by 4 consultant surgeons

Technique used: excision of a stoma sized circle from the mesh with conduit pull through and intra-peritoneal lateral mesh fixation to the anterior abdominal wall.

Data collected:

- Patient demographics
- Type of hernia repair (incisional or parastomal)
- Mesh related complications including:
 - Seroma
 - Conduit obstruction
 - Hernia recurrence.

Results

Total of 57 patients: (39 female and 18 male)
Mean age = 56 years (range 33-78)

34 out of 57 had incisional hernia repair
(mean age 60 years, range 41-77, 9 men)
23 out of 57 had parastomal hernia repair
(mean age 54 years, range 33-71, 6 men)

Complications following parastomal hernia repair where Strattice™ mesh was used:

Complication	No. of Cases	%
Conduit obstruction @ level of mesh	7	30%
Recurrence of parastomal hernia	6	26%
Stomal retraction with shortening and subsequent obstruction of their conduit	2	9%
Seroma	1	4%

Conclusion

39% of patients (9 out of 23 patients) who underwent parastomal hernia repair with Strattice™ mesh developed obstructive complications on post-operative follow up.

Although in the colorectal setting, the use of this mesh has been reported to reduce rates of hernia recurrence, our review showed a 26% (6 out of 23 patients) recurrence rate of parastomal hernias in patients with ileal conduits.

The rate of obstructive complications and recurrence of hernia is higher than expected when using Strattice™ mesh to repair parastomal hernias in patients with ileal conduits.

Further prospective studies are needed to assess the use of this new technology.

It may be that the successes seen in parastomal hernia repair with the use of Strattice™ mesh are at the expense of obstructive complications, which will need to be taken into consideration when planning for surgery.