Objective
Parastomal herniation is a common complication in stoma surgery. There are different techniques with or without mesh repair. To decrease the recurrence rate mesh repairs are favoured. Sublay mesh procedures are described in preventing and repairing parastomal hernias. We describe a modified hernia reconstruction with a mesh placed in retromuscular position.

Methods
The abdomen is opened through the previous midline laparotomy. Adhesiolysis and hernia reposition are performed. Then the enterostomy is dissected and, to avoid bacterial contamination, it is closed by using a linear stapler. The posterior rectus sheath is dissected laterally into the space between the lateral abdominal muscles. In this area an incision to the intraabdominal cavity is made. The fascial hernia defect is closed with an absorbable suture. A nonabsorbable mesh is fixed with prolene sutures in the retromuscular position overlapping the defect entirely for at least 5 cm. The colon is lateralized and passes approximately 7 cm from the lateral incision to the previous stomal passage point of the abdominal wall. The bowel is then covered by a tunneled mesh, comparable to the Sugarbaker method but also by the posterior rectus sheath. The mesh itself has no direct contact to the intraabdominal cavity. After wound closure, the bowel is opened and a new stoma is fixed in the former position.

Results
During the past two years four male patients with parastomal hernia underwent the described procedure. Three out of those four patients had an end colostomy, the other patient had an end ileostomy. (All of them had rectal amputation, three because of adenocarcinoma, one because of GIST with rectal metastasis.) Mean operative duration was 118 min (105-140) and average hospital stay 8.25 days (8-10). Mean follow-up was 9 months (1-17).
None of them had complications or recurrence, they negated obstructive symptoms and all stated that stoma care is now much easier. All of the patients would undergo procedure again and quoted to be very satisfied with the results.

Conclusion
Compared to an intraperitoneal mesh, the described technique may help to prevent mesh adhesions by avoiding contact between intestines and mesh. Whereas the direct mesh contact to the end ostomy may develop adherences that avoid parastomal hernia, thereby preventing stomal prolapse.
We reported only a small number of patients and short follow-up time, hence to prove longterm effectiveness further investigations will be needed.

Referenzen: