CASE REPORT

Intra-intestinal mesh migration presenting with faecal fistula after incisional hernia repair

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Abstract

Ventral hernias are a frequent problem in our society. Incisional hernia is not an infrequent sequel of ventral abdominal hernia repair. Incisional hernias are characterized by breakdown of the scar in the abdominal wall from an incision for any previous operation. This differentiates them from recurrent hernias where a previously done hernia repair operation breaks down. Such repairs are globally done by applying meshes of different sizes and types. Despite all the documented benefits of its use, a number of complications associated with mesh are reported in many studies. This study reports the case of a man operated for an incisional hernia, repaired by a proline mesh. He developed a complication of migrating mesh after 5 years of surgery at LUMHS, Jamshoro. There are very few such mesh complications reported in the literature.

Keywords: Ventral hernias, Incisional hernias, Mesh repair, Complications, Mesh migration.

Introduction

There is a rising trend of mesh repair of ventral abdominal hernias using different types of meshes.[1] This is evidenced by a reasonable reduction in the rate of recurrence of the hernias. Mesh repair is not free of complications.[2] A rare but serious complication is the migration of the mesh to sites away from its primary location like adjacent viscera.[3] This usually leads to serious and life threatening complications. There are reports documenting mesh migration followed by surgical intervention to retrieve the mesh and repair the damage caused by this migration.[4] This study reports a peculiar complication of a patient of incisional hernia operated by repair with proline mesh with eventual migration into lumen of intestine and presented with a faecal fistula.

Case Report

A 50 year old man, smoker, without any co-morbidity, operated for Para-umbilical hernia 8 years back and for incisional hernia with mesh repair 5 years ago presented with a lump at previous surgical scar just below the umbilicus with a discharging sinus in right iliac fossa. The lump was arising from the scar of previous surgical site, just below the umbilicus. The lump increased in size on standing and disappeared on lying down. There was a discharging sinus at the right iliac fossa through which faecal matter was leaking. The amount was variable and needed sterile dressings 3-4 times daily. The examination otherwise was unremarkable. The routine investigations were within normal limits. Colonoscopy was also negative for any fistulous opening. CT scan also showed no fistulous opening. Fistulogram was

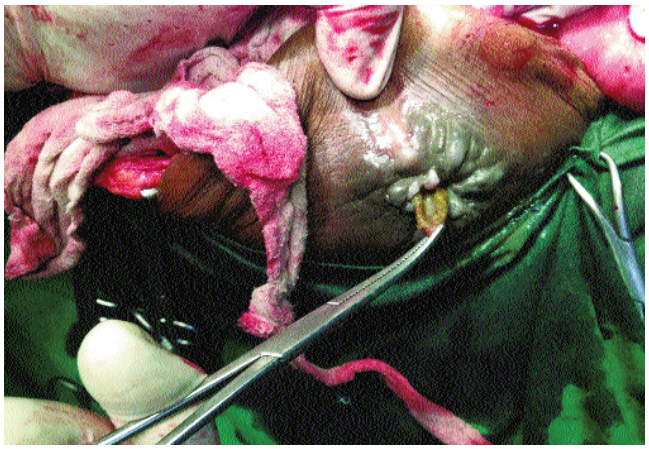

Figure-1: Prolene mesh seen through sinus in right iliac fossa, caught by artery forceps.

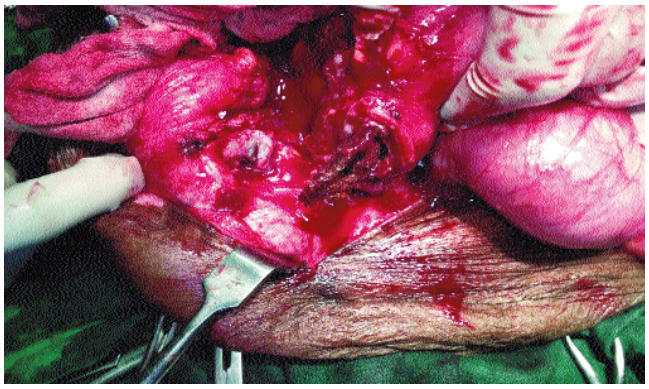

Figure-2: Mesh visible in the lumen of terminal ileum.

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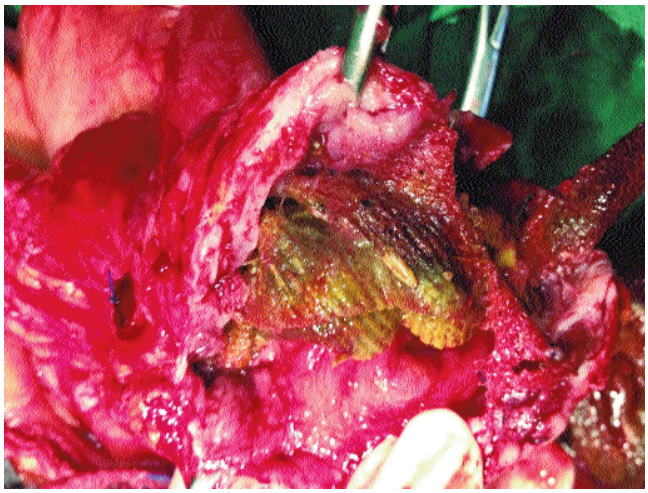

Figure-3: Mesh coming out from lumen of ileum.

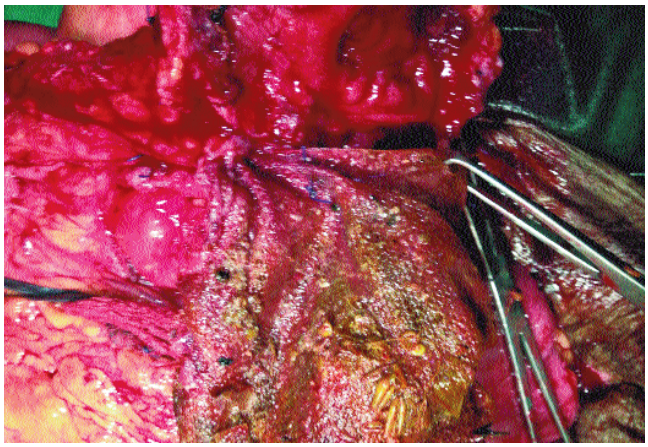

Figure-4: Mesh recovered from ileum.

done which showed a communication of the track with the gut. The case was finally diagnosed as recurrent incisional hernia with entero-cutaneous fistula. After all pre-requisites, a laparotomy was done. A defect of about 15x15cm in anterior abdominal wall was found with multiple adhesions of small bowel. There was a fistulous tract at terminal ileum 1 foot away from ileo-caecal junction. Prolene mesh found inside ileum which was removed and resection of the segment with fistulous opening was done followed by end to end anastomosis. The post operative period was uneventful and patient was allowed fluids after 72 hours and discharged on 12th post-operative day.

Discussion

Tension free hernioplasty is a well accepted procedure for most of the common hernias these days.[5] There are many benefits of mesh repair over suture as mentioned by many reports.[6] It reinforces the repair and is totally tension free making repair a more beneficial tool for the weakened, missing abdominal wall fascia. Despite all the benefits, there are several reports mentioning the complications associated with the use of synthetic meshes.[7,8] Mesh fixation is usually done but despite that meshes do infrequently migrate and they can damage the adjacent viscera, and can produce various complications. The intraluminal migration is however a very rarely seen complication and results when the mesh is not properly fixed and is in direct contact with adjoining organs which offer least resistance to erosion by the mesh. One of the most serious consequences of the intraluminal mesh migration is its ugly potential to pierce through the lumen of the bowel and to develop a faecal fistula, as in the present study. The faecal fistula is one of the most dreaded and potentially lethal complication which can increase mortality.[9]

Conclusion

Despite all the benefits, there are many complications of mesh repair which can increase the morbidity and mortality.

References

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