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Case Report

Amyand's hernia while repairing the bilateral inguinal hernia

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Abstract. Amyand's hernia is the term used for inguinal hernia containing appendix. It is a rare condition and found in 1% of inguinal hernia repairs. Here we report a case of Amyand's hernia in a 61 years old male who was diagnosed with bilateral inguinal hernia. He underwent surgery and bilateral inguinal hernia repair with prosthetic meshes and without appendectomy. The patient was discharged uneventfully.

Keywords: Amyand's hernia, inguinal hernia, bilateral, repair

Introduction

The presence of the appendix vermiformis inside an inguinal hernia sac was first described in 1736 by Claudius Amyand [1]. It has an incidence of 1% [2] and is complicated by acute appendicitis in 0.10 % of cases [3].

Inguinal hernia repair is one of the most common surgical procedures of general surgery and we may encounter some rare situations such as the appendix vermiformis inside the hernia sac. Appendectomy should or should not be performed at the same time with hernia repair. Here we report a case of Amyand's hernia occurring in a 61 years old man, who presented with bilateral inguinal hernia.

Case Report

A 61 years old male was admitted to our outpatient clinic with bilateral pain and swelling on both groins. He had operation for left inguinal hernia 6 years ago. On physical examination of inguinal region, there was bilateral reducible mass without scrotal involvement. A diagnosis was made as bilateral inguinal hernia with the left side recurrence. He underwent surgery and first the left recurrent inguinal hernia side was approached with a 5 cm left side old oblique incision parallel to the inguinal ligament. Subcutaneous tissue through Scarpa's fascia was divided until aponeurotic fibers of the external oblique muscle were seen. After dividing the external oblique to the superficial inguinal ring, the contents of the inguinal canal were then circumscribed using blunt dissection. The hernia sac lateral to the inferior epigastric pedicle was dissected away from the spermatic cord to the deep inguinal ring. The hernia sac was opened, peritoneum was ligated and dissected then excessive hernia sac was excised. We performed a tension free repair with polypropylene mesh (7x10cm).

Next the right inguinal hernia side was approached in the same manner. The hernia sac was opened and the appendix vermiformis and distal ileum segments were seen inside (Fig. 1). There were no inflammatory changes in the appendix, ileum or cecum. The hernia sac contents including appendix vermiformis and distal ileum segments were retracted into the peritoneal cavity. Appendectomy was not performed. The peritoneum was ligated and dissected then excessive hernia sac was excised. A tension free repair with polypropylene mesh (7x10cm) was performed same as for the left side. The patient was discharged uneventfully at first day after operation.

Discussion

This eponymous disease was named after Claudius Amyand (1680-1740) who performed the first successful appendectomy on an 11-year-old boy in 1735 [1]. The incidence of Amyand's hernia is less than 1% of inguinal hernias and male predominance with usually right side location is common [2]. As in our case, the involvement of appendix is seen mostly during operation incidentally. However, preoperative diagnosis can be made by ultrasonography, computerize tomography and magnetic resonance imaging.

Losanoff and Basson classified Amyand's hernia to 4 types [4, 5]. In type 1, the inguinal hernia sac had a normal appendix inside, which was managed with a reduction and mesh repair [6]. In types 2, 3 and 4, there was appendicitis inside the hernia sac. Appendix vermiformis was inflamed in type 2, perforated in type 3 and complicated in type 4. Appendectomy and hernia repair without any synthetic

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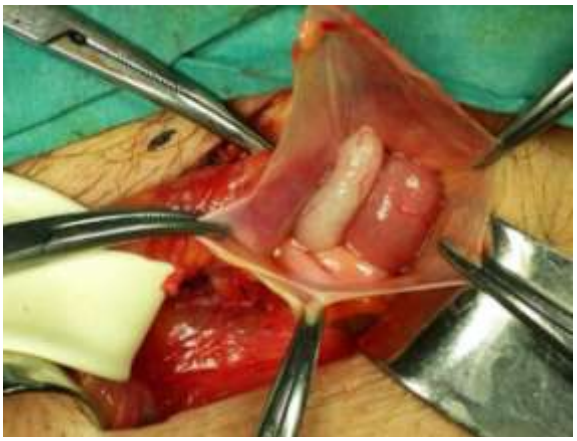

Figure 1 Right spermatic cord, appendix vermiformis and distal ileum inside the hernia sac were seen.

material such as polyprolene mesh was performed in types 2,3 and 4.

Our patient had bilateral inguinal hernia. Left recurrent hernia and right inguinal hernia which had appendix vermiformis inside were both repaired tension free with polypropylene meshes. Appendectomy was not performed. Amyand's hernia is a rare entity and hard to diagnose preoperatively. We conclude that type 1 Amyand's hernia can be repaired with polyprolene mesh without requiring any appendectomy.

Conflict of Interest

The authors declare no conflicts of interest.

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