An Unusual Herniation Through Omentoplasty Defect

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Introduction

Omental transfer is an old known procedure to revascularize the ischaemic limb. Its efficacy is doubtful but still practised in various parts of the country [1,2,3]. Both free and pedicled omental grafts have been used in the management of rest pain and non healing ulcers associated with Buerger's disease. Sometimes the transgression of natural anatomical planes is associated with bizarre complications. Here, we present an unusual case of herniation through the defect made for omental transfer. We found that the passage of the omentum through musculoaponeurotic plane was responsible for the hernia. To our knowledge, such complication has not been previously reported.

Case Report

A 53 year old exserviceman had reported to Artificial Limb Centre (ALC) for repair of his prosthesis in August 1999. He was found to have a symptomatic large left sided

groin hernia for which he was referred to us. He had been a known case of Buerger's disease since 20 years under treatment in various service hospitals. During the course of the disease, he had undergone a right below knee amputation about 10 years ago followed by gangrene in the left foot about 9 years ago for which an omental transposition had been done. This operation did not succeed and ultimately he ended up with a left above knee amputation 6 years ago. He had been symptomatic with a left groin swelling since 5 years, which had become painful and enlarged since the last one year. The swelling was extending down to the upper thigh and was straddled by the inguinal ligament into a smaller upper and a larger lower swelling (Fig 1) which was partially reducible on manipulation. The cough impulse was positive. After reduction of swelling, a defect of about 3 cms diameter was palpable in the left groin, admitting two fingers very easily. The tone of abdominal musculature was good. Both femoral pulses were palpable and visible on Colour Doppler with no distal run off. The ultrasonography of abdomen revealed loops of bowel in the sac without any thickening. No other abnormality was detected on general and systemic examination. Exploration was carried out by left transverse groin incision. At operation a defect of 3 cms diameter was found in the musculoaponeurotic tissue (Fig 2) fashioned for the omentoplasty to revascularize the limb. The small gut with sigmoid colon was found herniated and the transposed omentum had attenuated. The ring (defect) was closed with prolene suture and over it the prolene mesh was applied as

Fig. 1 : Clinical photograph showing bilateral amputation with large left groin hernia

Fig. 2 : Operative photograph showing musculoaponeurotic defect with a loop of bowel lying adjacent

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onlay reinforcement. Complete haemostasis was done. The rest of the wound was closed over the Romovac closed drainage system. Post-operative recovery was uneventful.

Discussion

Complications of pedicled omentoplasty include total necrosis of the omental flap, ileus, infection, abscess formation and intestinal obstruction [4]. The performance of a pedicled omentoplasty with special attention to transposing techniques could minimize the complication attached to it. An unusual complication, where the herniation occurred through the tunnel created for omentum to bring it into the thigh, is not found on extensive search of literature. Boiskin et al found herniation of transverse colon into the transposed omentum, which was used, for chest reconstruction following sternectomy [5]. Bissada Nkat et al found herniation through omentoplasty performed for repair of posterior urethral strictures by transpubic route in two cases, which resulted in a perineal hernia in one case and a pubic hernia in the other [6]. Lenzi R et al also had perineal hernias containing bladder following omentoplasty for transpubic repair of stricture urethra, which they managed successfully by repair of the defect with a synthetic mesh, like we did in our case. They found that the presence of omentum to fill the dead space was a contributing factor for development of hernia [7].

We also discovered that the passage of the omentum through musculoaponeurotic plane was responsible for the persistence of opening and occurrence of unusual herniae. This operation is fairly obsolete and given up by a large number of surgeons, however, to prevent such complications we suggest adherence to strict tissue plane dissection and avoidance of wide tunnel. Respect the tissues and tissues will respect you.

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There was this city doctor who started a practice in the countryside. He once had to go to a farm to attend to a sick farmer who lived there. After a few housecalls he stopped coming to the farm. The puzzled farmer finally phoned him to ask what's the matter, didn't he like him or somethin'. The doctor said, "No, it's your ducks at the entrance...every time I enter the farm, they verbally insult me!"

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