Brief Case History and Literature Review:

Hanging Giant Inguinal Hernia

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Abstract: The giant inguinal hernia has now become rare. Better hygienic conditions and better hernioplasty techniques, carried out with local anesthesia; usually encourage patients to undergo surgical treatment of the hernia soon after diagnosis. A case of giant inguinoscrotal hernia is being reported. Problems arise in management for both the patient and the surgeons because of the rarity of reported cases.

Key-words: Hernia, Giant inguinoscrotal hernia, Giant hernia, Lichtenstein repair, mesh repair

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INTRODUCTION: The giant inguinal hernia has now become rare. Better hygienic conditions and better hernioplasty techniques, carried out with local anesthesia; usually encourage patients to undergo surgical treatment of the hernia soon after diagnosis. The indirect inguinal hernia progresses through various grades of severity[1]. A case of giant inguinoscrotal hernia is being reported. Problems arise in management for both the patient and the surgeons because of the rarity of reported cases.

CASE REPORT: A 65-year-old male was admitted with severe shortness of breath. He was a known asthmatic from past 20 years. On routine examination he was noted to have a very large scrotal swelling reaching the lower third of the thigh. The cough impulse was negative and the swelling was irreducible. The swelling developed over many years ago and had gradually become bigger over the last 15 years. His pulmonary function tests were grossly deranged and peak expiratory flow rate were decreased. Due to the inguinal hernia he was confined to the bed and was not even able to lie supine on the bed. However he had no signs of intestinal obstruction. A radiograph and ultrasound examination of the swelling showed both small and large bowel inside the swelling.

He underwent treatment for chronic asthma and shortness of breath for 2 months and was referred back after his pulmonary function tests improved. Lichtenstein repair hernioplasty using prolene mesh was done. Hernial sac contained ileum to sigmoid colon including appendix and omentum. Post operatively patient developed shortness of breath and improved in 2 weeks. He is being followed up for one year and has no recurrence till date.

DISCUSSION: Inguinal hernia is very common, especially in developing countries where it constitutes a major surgical workload. An inguinal hernia is considered to be giant if its lower end reaches mid thigh or beyond when the patient is standing[1]. Giant inguinoscrotal hernias present formidable surgical problems and the morbidity and mortality associated with their repair are high. Reduction of large hernia can compromise lung function, and patients may have been previously

denied surgery because of the risk of respiratory compromise. Potentially fatal cardio-respiratory failure can develop following the reduction of giant hernia, due to the sudden increase in intra-abdominal pressure and elevation of the diaphragm. Postoperative ileus can further increase intra abdominal pressure[2]. Our patient developed mild respiratory distress after surgery but recovered.

There are few surgical techniques described in the literature for repairing giant inguinoscrotal hernias. The most common technique requires frequent insufflations of air into the abdominal cavity in order to create space to accommodate herniated viscera and facilitate fascia repair with minimal tension[3]. This technique, however, is more likely to cause expansion of the thin hernia sac, rather than the contracted abdominal cavity, and since the patient is only ready for his operation approximately 2 weeks after creating the pneumoperitoneum, some patients suffer from severe discomfort, shoulder pain, tachycardia, and dyspnoea, which may necessitate gas withdrawal. Another technique describes debulking the contents of the hernia sac by performing resection of the bowel in the hernia sac, and reconstruction of the abdominal wall using Marlex mesh and a tensor fasciae lata flap[2].

A similar technique was described by Merret et al., which consisted of reduction of the hernia; repair of the hernia orifices with Marlex mesh and the creation of a midline abdominal wall defect to increase the intra-abdominal capacity followed by covering this defect with Marlex mesh with a rotation flap of inguinoscrotal skin[4]. Despite the increase in the intra-abdominal capacity and prevention of respiratory compromise, this operation includes two separate procedures with no attempt at reperitonisation underneath the prosthetic mesh.

In 2001, El-Dessouki described a new way to achieve this by creating a midline abdominal wall defect to increase the intra-abdominal capacity to accommodate the hernia contents. The hernia sac is then pulled up to the abdomen and fashioned as a rotation flap to augment and close the peritoneum over the replaced contents. Lastly, a giant polypropylene mesh is inserted in the preperitoneal space to cover the midline defect created and to buttress both inguinal regions[5]. We performed hernioplasty using prolene mesh thus avoiding multiple surgeries.

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