Challenging Cases In Hernia Repair

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One of my most challenging hernia case was a gentleman in his 40s who had undergone a Hartmann's procedure for perforated diverticulitis and subsequent colostomy closure. He developed a large midline hernia as well as a hernia at the old stoma site in the left lower quadrant. The distance between the medial borders of his rectus muscles was 14 cm, and the midline scar was wide and thin. The abdominal wall deformity was very disfiguring, and his ability to return to work was compromised by the large hernia. He was obese, and had a history of wound infection for both the Hartmann's procedure and colostomy closure.

A CT scan of the abdomen was obtained without the use of enteral or intravenous contrast to determine the exact distance between the medial borders of the rectus muscles as well as whether or not the old ostomy site was through the left rectus muscle or out lateral to it.

Additionally, the patient was told that he would not be able to undergo an abdominal wall reconstruction without weight loss. In addition to an aggressive medical weight-loss program (he refused weight-loss surgery), he was placed on a very low calorie liquid diet for two weeks prior to his operation. Fortunately, his 50 pound weight loss enabled him to have a reasonable body mass index to undergo an abdominal wall reconstruction.

We performed a bilateral endoscopic component separation along with excision of

his old scar and open incisional hernia repair utilizing a new suturing technique for laparotomy closure along with a biologic prosthetic underlay used as suture line reinforcement. Excision of the scar allowed us to close relatively normal skin. The operative an immediate postoperative course or unremarkable, and his one-year follow-up visit revealed no evidence a recurrent hernia, and excellent abdominal wall contour. Additionally, he was back to all of his normal activities including work.

My first piece of advice to other surgeons would be to avoid the hernia in the first place. It has been shown that perforated diverticulitis with him she grade 3 has at least a 90% success rate when treated with laparoscopic peritoneal lavage and drainage alone. This would not only avoid a laparotomy, but also subsequent operation for colostomy closure, and nearly eliminate hernia in the first place. Because this technique has still not been widely adopted, we will continue to face cases like this for some time to come.

Advice I would offer the other surgeons faced with the same case would be a mandate for significant preoperative weight loss. If the body mass index is simply too great, it can be exactly like trying to close a suitcase with too much stuff in it. Even if the suitcase can be closed, it may burst open with even the slightest stress. Patients seem to understand this analogy quite well. Stopping smoking is also essential, and fortunately our patient was a non-smoker.

If he was a smoker however, I would nicotine test them for weeks prior to surgery and postpone the operation if this was positive.

Additionally, the suturing method described by Israelsson and colleagues described in archives of surgery in November of 2009 is essential for closure of any laparotomy incisions, especially those related to incisional hernia. Briefly, this technique utilizes 5 to 8 mm bites as well as 5 to 8 mm travel, taking precautions not to include any muscle and as little fat as possible in the suture line. Choice and placement of prosthetic type of the decisions should be based on the clinical scenario, technique of hernia repair, and specific patient characteristics such as history of previous infections, or likelihood for abdominal surgery in the future.