
Laparoscopic inguinal hernioplasty

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The treatment of inguinal hernias will continue to be a significant part of many general surgeons, day to day workload. Endoscopic hernia repair adds a new dimension to the management of this problem. Rather than replacing open hernioplasty, the endoscopic approach can be used to complement other methods of hernia repair. Laparoscopic hernia repair is an efficient technique associated with small morbidity and compares favourably to current open surgical techniques. Patients are relatively pain-free following this procedure and can return to work and normal activities much quicker than following conventional hernia repairs. Although the follow-up of most series is not longer than three years, the initial results show a very low recurrence rate comparable to the mesh repair using Stoppa's technique at open surgery. Stoppa demonstrated that most of the recurrences occurred in the first year and the recurrence rate decreased thereafter, so a technically satisfactory operation will probably prove to be efficient in the long-term. The two real problems of the laparoscopic hernia repair are the cost of the operation, which is higher than for conventional surgery, and the necessity for general anaesthesia. The increased cost should be compared with the gain associated by a quicker and more productive return to work by the majority of the patient and in the future general anaesthesia may not be required for laparoscopic hernia repairs. Laparoscopic surgery without carbon dioxide insufflation, using abdominal wall suspension is currently being examined. In the future, this may prove to be the answer to performing laparoscopy under local anaesthesia without a tense pneumoperitoneum. ¹⁰¹ At present, the laparoscopic repair is best suited to the younger patient with good general health who can not afford an extended time away from work. The older patient with pre-existing cardiopulmonary disease and complicated hernia should still be managed in the conventional way. We hope that by adding an endoscopic alternative to the general surgeons options, other modes of managing inguinal hernia will evolve. Among the techniques described here the most reproducible and efficient appears to be the transabdominal preperitoneal mesh repair which has the advantage of being easy to train surgeons. It also allows a more simple reduction of large hernias and a simultaneous exploration of the intraabdominal cavity. The total extra-peritoneal approach, although more elegant, has a higher incidence of postoperative pain and is more difficult to reproduce and teach. Intraperitoneal onlay mesh is not advocated at the current time. As inguinal hernia is the commonest type of hernia, there are many methods for dealing with it. These methods include the classic open techniques with its many disadvantages and the recent laparoscopic methods. The surgical treatment of groin

hernias continues to undergo technical modifications, the introduction of minimally invasive surgery has added a possible dimension. The three dimensional laparoscopic anatomy of the inguinal region must be positively identified by the surgeon in order to avoid injury of important structures. In this essay, a review was done on the classic anatomy, laparoscopic anatomy of the inguinal region, pathophysiology and clinical manifestations of the inguinal hernia. The exact cause of inguinal hernia is still unknown but the following factors contribute in its occurrence. A preformed congenital sac, raised intra-abdominal pressure and weak abdominal musculature. The complications of inguinal hernia are inflammation, obstruction, irreducibility and strangulation. Complications of open classic hernia repair which can be avoided or minimized by laparoscopic repair are : severance of testicular blood supply, vas deferens, nerves. Injury to the bowel wall complications and hernia recurrence. The commonly used laparoscopic instruments are 3 cannulas and trocars (5mm-10mm-12mm) endograsper, endoscissors, endodissector and stapling instruments. The main principles used in laparoscopic hernia repair are transabdominal preperitoneal Onlay mesh repair and the intraperitoneal Onlay mesh repair. The main complications of laparoscopic hernia repair are improper closure of the defect, adhesion to the prosthetic mesh, hydrocele and recurrence. The "advantages of this procedure are marked reduction of postoperative pain and groin discomfort with rapid return to the normal activities, this procedure also did not cut any muscles of the anterior abdominal wall and does not interfere with shutter mechanism of the inguinal canal. However, further follow up is needed to evaluate the late effects of this recently introduced surgical technique.