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RESEARCH ARTICLE
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Surgical repair of recurrent inguinal hernia by using Dacron mesh

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ABSTRACT

In this study we describe our technique for repair of recurrent inguinal hernia, using Dacron mesh placed by the inguinal route.

The inguinal canal is opened widely, a sheet of mesh is inserted and the muscles are closed without tension, we have repaired one hundred twenty patients with recurrent hernias by this method. one patient died and 12 patients have acceptable morbidity, in one case the bladder was injured.

Six patients had infected wounds, and in two cases of these patients a new prosthetic mesh was inserted successfully one year after removing the mesh, two patients had hematoma, one patient had retention of urine and one patient had cardiac arrhythmia. The recurrence rate occurred in 3 patients at 3.5%.

We use the dacron mesh which is inexpensive and rapidly incorporated and the mesh reduces the side of the deep inguinal orifice and reinforces the fascia transversalis. Our technique is safe, and effective and allows a definitive repair of all types of hernia and patients.

Keywords: *hernia recurrence , surgery Dacron mesh.*

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INTRODUCTION

Repair of an inguinal hernia is common operation , the surgeon used many procedures , and most surgeons repaired hernias by the inguinal route with simple closure of the inguinal canal and incidence of recurrence between 6% to 10% but in our technique to repair of recurrent inguinal hernia by using . prosthetic Dacron mesh which reinforces the fascia transversal s the recurrent rete is 3% (1).

Surgical treatment of recurrence is not easy using classic methods of repair (2) and the repeated recurrence rate between 10% -20% (3) but used prosthetic materials the incidence of recurrence 4% (4), other authors have reported success rate or nearly 100% and most of the recurrence are early and caused by faulty technique (5) many procedures using prosthetic material have been described m the prosthetic may be placed super facially and a small mesh reinforcing the closure of the introduction defect (6) a laperosapic inguinal herniorraphy has developed recently and this still in evolving state (7) .

Our inguinal approach avoids the disadvantages of anew incision and allows adequate evaluation of the quality of the tissues we place a large flexible mesh , which is inserted between the peritoneum and the cord with a slit in it , the whole area of weakness can be covered completely without tension .

PATIENT AND METHOD

A prospective study for 80 patients with recurrence inguinal hernia were repaired by using dacron mesh by the inguinal route in Al-Shifaa private hospital and diala private hospital during the period of (2017-2021) 72 man and 8 woman their age range from 30 to 66 years the mean age 46 years, 6 patients had bilateral recurrence hernias 4 of these patients have been done for him bilateral dacron mesh as one stage procedures and 2 of patients had done for him only one Side and after 6 month we did the other sides. 43 cases (78%) the hemin was first recurrence and 74 on the right. 46 on the left side.

The interval to recurrence was less than 6 months in 20 cases, 12 monthes in 15 cases and between (1-3) years in 50 cases.

Our methods of repair an intravenous dose of first generation cephalosporin is given preoperatively, (8) the inguinal incision is made through the original scar, the external oblique aponeurosis is incised according to its direction, the spermatic cord is carefully identified and isolated and the original anatomy should be reconstituted by complete dissection, the posterior floor of fascia transversalis is opened from deep ring to the pubis, the cremaster muscles are divided and the cord is released at the internal ring, the hernia sac is then dissected and excised as usual piece of dacron mesh is inserted between the peritoneum and the cord with a slit in it after opening (9). the fascias transversalis and the lower border of mesh is fixed by 2/0 nylon to inguinal liqment to the upper border fixed behind the conjoint tendon and internal oblique muscles (10). The external oblique aponeurosis is closed infront of the cord with owt tension, the wound is then closed without driange (11).

RESULT

This study shows that surgical repair of recurrent inguinal hernia by dacron mesh is superior to repair to other procedures 64 patient (80%) are satisfy for this procedures.

One patient died 24 hours after operation due to myocardial infarction and 6 patients have morbidity which is acceptable, in one cases the bladder injured and was treated by simple. suture and bladder driange for 10 days, 5 patients had wound infection , treated by removal of stitches and antibiotics and dialy dressing and in two cases of these patients anew prosthetic mesh was inserted successfully 6 month after removal of the mesh, two patients have hematoma, one patient had retention of urine .

The recurrence rate occurred in 3 patients (3-5) who are not come for further follow up and reoperation done for him after 6 month the median hospital sty was 4 days, range (4-7) days.

All patients were seen two months after operation, 10 cases were seen after four months. 10 at six months and 10 at one year mean follow up was 11 months.

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DISCUSSION

Recurrent hernia with classic procedures is about 10% but in bassin repair about 8.6%(3) and in shouldice clinic 6% based on an experience , many factors are involved in the etiology of recurrence including obesty ,constipation , chronic coughing (5)and faults in technique is the most cause factor (6) also atrophy of fascia transversalis is the anatomical factors(1) so must repair this fascia to prevent recurrence, surgical treatment of recurrence is not easy and repair of recurrence by classic methods the recurrence rate range between (10- 20)%(7) but in our method by using Dacron mesh is 3% is the best treatment of recurrence because we are reinforcing the fascia transversalis and closure of inguinal canal allow a good and definitive hernia repair for all types of hernias in inguinal and femoral.

CONCLUSION

We use the dacron mesh which is inexpensive and rapidly incorporated and the mesh reduce of the side of the side of the deep inguinal orifice and reinforcing the fascia transversalis.

Our technique is safe, effective and allows a definitive repair of all types of hernia and patients

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