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Repair Of Abdominal Wall Defects (Inguinal Hernia Repair And Management).

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Abstract:

Sixteen patients were included. Direct in-hospital costs were higher for unilateral EH. Direct out-of hospital costs were lower after EH in some studies. Indirect costs were lower for EH. Total costs were higher for EH in three studies and lower in one study. With EH, QoL was better, pain was less, operating time was longer and time return to work and other activities was shorter.

tension-free meshplasty and herniorrhaphy are safe, simple andapplicable even in elderly patients after adequate preoperative assessment and optimization. Although associated with longer hospital stay, the mortality rate is nil and complication as well as recurrence rate is low. Hence, timely repair is necessary in elderly patients even in those with comorbid conditions.

Key word: Abdominal, Repair, Hernia, Inguinal.

Introduction:

Hernia is derived from the Latin word for rupture (1). Ahernia is defined as an abnormal protrusion of an organor tissue through a defect in its surrounding walls. Althougha hernia can occur at various sites of the body, these defectsmost commonly involve the abdominal wall, particularlythe inguinal region (1).

Hernia surgery is one of the earliest forms ofsurgery and various techniques of hernia repair have beendescribed. The ideal treatment of inguinal hernia shouldbe well defined and should be the least traumatic as regardsto both the requested type of anesthesia and the operativetechnique, least expensive, least per-and postoperativemorbidity, the chosen technique should also be the easiestto learn and perform and the positive results should be themost reproducible (2, 3).

Abdominal wall hernias are common, with a prevalenceof 1.7% for all ages and 4% for those aged over45 years. Inguinal hernias account for 75% ofabdominal wall hernias, with a lifetime risk of 27% inmen and 3% in women. (4) Repair of inguinal hernia isone of the mostcommonoperations in general surgery,with rates ranging from 10 per 100 000 of thepopulation in the United Kingdom to 28 per 100 000in the United States. (5) In 2001-2 about 70 000 inguinalhernia repairs (62 969 primary,

4939 recurrent) weredone in England, requiring more than 100 000 hospital bed days. Ninetyfive per cent of patients presenting toprimary care are male, and in men the incidence risesfrom 11 per 10 000 person years aged 16-24 years to200 per 10 000 person years aged 75 years or above. (6).

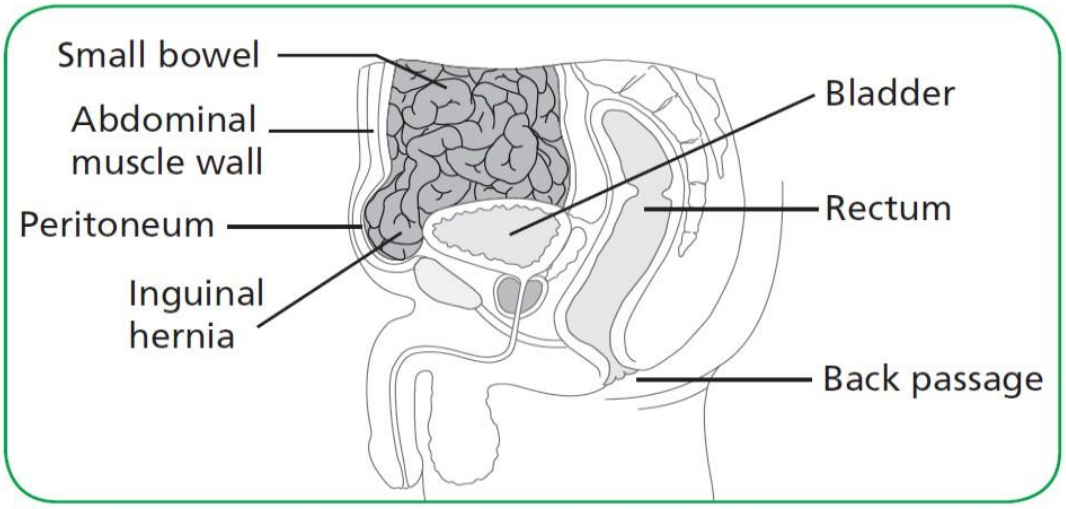

Fig. (1) : showed the inguinal hernia human.

inguinal hernias present?

Inguinal hernias present with a lump in the groin that goes away with minimal pressure or when the patient is lying down. Most cause mild to moderate discomfort that increases with activity. A third of patients scheduled for surgery have no pain, and severe pain is uncommon (1.5% at rest and 10.2% on movement). (7) Inguinal hernias are at risk of irreducibility or incarceration, which may result in strangulation and obstruction; however, unlike with femoral hernias, strangulation is rare. National statistics from England identified that 5% of repairs of primary inguinal hernia were emergency operations in 1998-9. Older age and longer duration of hernia and of irreducibility are risk factors for acute complications. Gallegos and colleagues studied the presentation of inguinal hernias with a "working diagnosis of strangulation." Only 14 of their 22 patients with an acute hernia had compromised tissue at operation, with one of 439 patients requiring bowel resection. (8) Though the study numbers are small, these findings emphasise the rarity of strangulation. A recent larger study estimated the lifetime risk of strangulation at 0.27% for an 18 year old man and 0.03% for a 72 year old man. (9, 10).

Inguinal Hernia Signs and Symptoms

You could have a direct inguinal hernia if you:

- Hurt when you cough, bend, or lift something heavy
- Feel pressure, weakness, heaviness, or a dragging sensation in your groin
- Have swelling around your testicles
- Feel a burning or aching sensation at the hernia's bulge

You may be able to gently push the bump back up into your abdomen to relieve some of the discomfort.(11, 12)

Inguinal Hernia Causes and Risk Factors

A baby can get an indirect inguinal hernia if the lining of their abdomen doesn't fully close while they're developing. What's left is an opening at the upper part of the inguinal canal. That's where a hernia can take shape.

Older adults usually get a direct inguinal hernia because the muscles of their abdominal wall can weaken.(13)

Women rarely have this type of hernia. The broad ligament of the uterus is right behind the abdominal wall, which supports it and shields the inguinal canal.

Men don't have that barrier, so stress and gradual weakening of their abdominal muscles over time make it more likely something can push through to the inguinal canal. (14).

EPIDEMIOLOGY

There are more than 600,000 hernia repairs every yearin the United States. 5% of the population will developan abdominal hernia; the prevalence, however, mayeven be higher (15).

PATHOGENESIS

The development of an inguinal hernia is multifactorial.In case of a congenital pathogenesis a preformedopening is caused by incomplete closure of the abdominalwall or in case of acquired hernia it is causedby a dehiscence of the fasciasaccompagnied by a lossof abdominal wall strength. Etiologic factors may beincreased intra-abdominal pressure or changes in theconnective tissue (16).

DIAGNOSIS

Diagnosis of classic inguinal hernia is mostly straightforwardusing physical and ultra-sound examination.CT-scan, MRT, x-rays are not recommended for routineuse (16). The differential diagnosisincludes mainly disorders of the groin region (15).

Results and discussions:

Inguinal hernia repair was performed in 60patients and all the patients were both male and female. Patientdemographics and clinical characteristics are tension free meshplasty was performed in 47 patientswith uncomplicated inguinal hernia and herniorrhaphy wasperformed in the remaining 13 patients (out of the tenpatients, seven were complicated hernias and three patientswere too poor to afford a mesh, hence herniorraphy had tobe done) (16).All patients were above 40 years of age, and themost representative age group was from 52-60 years, with 29 patients. The oldest patient was 73 years old. Directhernia was seen in 32 patients (54.13%) and indirect herniawas seen in 28 (41.46%) patients. In 36 patients (69.14%)the hernia was on the right side, in 19 patients (21.2%) itwas on the left side and in five patients (11.67%), it wasbilateral.Amongst 60 patients of inguinal hernia, 50 wereuncomplicated (45 unilateral and five bilateral) and sevenpatients presented as complicated inguinal hernia; and ofthe seven complicated cases, obstruction was present inthree patients, strangulation were seen in three patientsand Richter’s hernia in one patient.(17, 18).

Most studies reported on direct in-hospital costs. In some cases, a detailed analysis wasmade, including, for example, the actual instruments that were used and the grade of staffemployed; at the other end of the spectrum, a general rate was given for OR time with theusually used disposable instruments. Because herniorraphy frequently is performed in daycare surgery, hospital stay is often left out of the equation. The results for direct in-hospitalcosts.(19, 20).

Postoperative Care

The current standard of care after hernia repair is general wound care. The length of required inactivity varies greatly based on the surgeon's preference, but activity is usually permitted within two to four weeks for laborers and within 10 days as tolerated for professionals.(21,22).

Table (1): showed the Patient demographics and clinical characteristics

Characteristics	Variable
Age	>60
Number of patients	60
Gender · Male	51
Female	9
Emergent repairs	9
Elective repairs	48
Recurrent hernias	3

References :

1. Malangoni MA, Gagliardi RJ. Hernias. In: Townsend CM,Beauchamp RD, Evers BM, Mattox KL, editors. Sabiston's Textbookof Surgery. 17th edition. Philadelphia: Elsevier-Saunders; 2004.p.1199-218.

2. Roseano M, Ressetta G, Pozzetto B, Babich F, de Manzini N. Thetreatment of inguinal hernia in the elderly: open technique orlaparoscopic approach? Acta Biomed. 2005;76 Suppl 1:52-5.

3. DR. DEVAJIT CHOWLEK SHYAM; DR. AMY GRACE RAPSANG: Inguinal hernias in patients of 50 years and above. Pattern andoutcome. Rev. Col. Bras. Cir. 2013; 40(5): 374-379.

4. Kingsnorth A, LeBlanc K. Hernias: inguinal and incisional. Lancet

2003;362:1561-71.

5. Devlin HB. Trends in hernia surgery in the land of Astley Cooper. In:

Soper NJ, ed. Problems in general surgery . Vol 12. Philadelphia, PA:

Lippincott-Raven, 1995:85-92.

6. Chow A, Purkayastha S, Athanasiou T, Tekkis P, Darzi A. Inguinal

hernia. BMJ ClinEvid2007;4:1-20.

7. Page B, Paterson C, Young D, O'Dwyer PJ. Pain from primary inguinalhernia and the effect of repair on pain. Br J Surg2002;89:1315.

8. Gallegos NC, Dawson J, Jarvis M, Hobsley M. Risk of strangulation in

groin hernias. Br J Surg1991;78:1171-3.

9. Fitzgibbons Jr RJ, Jonasson O, Gibbs J, Dunlop DD, Henderson W,Reda D, et al. The development of a clinical trial to determine ifwatchful waiting is an acceptable alternative to routine herniorraphyfor patients with minimal or no hernia symptoms. J AmCollSurg2003;196:737-42.

10. John T Jenkins, Patrick J O'Dwyer. Inguinal hernias. BMJ | 2 febuary 2008 | Vol. 336.

11. EU Hernia Trialists Collaboration. Laparoscopic compared with openmethods of groin hernia repair: systematic review of randomized controlled trials. Br J Surg2000;37:860-7.

12. Memon MA, Cooper NJ, Memon B, Memon MI, Abrams KR. Metaanalysisof randomised clinical trials comparing open andlaparoscopic inguinal hernia repair. Br J Surg2003;90:1479-2.

13. Neumayer L, Giobbie-Hurder A, Jonasson O, Fitzgibbons R Jr,

Dunlop D, Gibbs J, et al. Open versus laparoscopic mesh repair of

inguinal hernia. N Engl J Med 2004;350:1819-27.

14. GrantAM,ScottNW,O'DwyerPJ, for theMRCLaparoscopicHernia TrialGroup. Pain and numbness after laparoscopic and open repair of a

groin hernia: five year follow-up of a randomized trial. Br J Surg

2005;91:1570-4.

15. Conze J, Klinge U, Schumpelick V. Hernias. In: Surgicaltreatment – evidence-based and problem-oriented.Holzheimer RG, Mannick JA (eds.). ZuckschwerdtVerlagMunchen Bern Wien New York 2001:611-618.

16.Malangoni MA, Gagliardi RJ. Hernias. In: Townsend,Beachamp, Evers, Matoox (eds.) Sabiston Textbook ofSurgery 17th edition 2004 Elsevier Saunders Publishers:1199-1218.

17. Kux M. Anatomy of the groin: a view from the surgeon. In:Fitzgibbons RJ Jr, Greenburg GA,eds.Nyhus and Condon'sHernia. 5th edition Philadelphia: Lippincott, 2002:45-53.

18. Lacroix VJ, Kinnear DG, Mulder DS, Brown RA. Lower abdominal

pain syndrome in national hockey league players:a report of 11 cases. Clin J Sport Med 1998;8:5.

19. Nyhus LM. Iliopubic tract repair of inguinal and femoral hernia.The posterior preperitoneal approach. SurgClinNorth Am 1993;73(3):487-499

20.Oishi SN, Page CP, Schwesinger WH. Complicated presentations

of groin hernias. Am J Surg 1991;162(6):568-570.

21. Rutkow IM. Demographic and socioeconomic aspects of hernia

repair in the United States in 2003. SurgClin North Am 2003;83:10451051

22. Salcedo-Wasicek MC, Thirlby RC. Postoperative course after

inguinal herniorrhaphy. A case-controlled comparison of patients receiving workers' compensation vs patients withcommercial insurance. Arch Surg 1995;130(1):29-32.

23. Johnston CAM, Wiley JP, Lindsay DM, Wiseman DA. Iliopsoas

bursitis and tendonitis: a review. Sports Med 1998:25(4):271-283

24. Kald A, Fridsten S, Nordin P, Nilsson E. Outcome of repairof bilateral groin hernias: a prospective evaluation of1,487 paitents. Eur J Surg 2002;168(3):150-153.