integrated working

NHS
West Suffolk
Clinical Commissioning Group

LOW PRIORITY PROCEDURE – T32 Surgical treatment of Hernias

Policy author: Ipswich and East Suffolk & West Suffolk CCG
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Policy Summary

This policy covers the management of inguinal, femoral, umbilical and incisional hernias in patients aged over 16 years, including the criteria for referral to secondary care.

Eligibility criteria

Inguinal:

For asymptomatic or minimally symptomatic hernias, the CCG advocates a watchful waiting approach, under informed consent.

Surgical treatment should only be offered when one of the following criteria is met:

• Symptomatic i.e. symptoms are such that they interfere with work or activities of daily living OR
• The hernia is difficult or impossible to reduce, OR
• Inguino-scrotal hernia, OR
• The hernia increases in size month on month

Femoral:

• All suspected femoral hernias should be referred to secondary care due to the increased risk of incarceration/strangulation

Umbilical:

Surgical treatment should only be offered when one of the following criteria is met:

• pain/discomfort interfering with Activities of Daily Living OR
• Increase in size month on month OR
• to avoid incarceration or strangulation of bowel

Incisional

Surgical treatment should only be offered when **both** of the following criteria are met:

• Pain/discomfort interfering with Activities of Daily Living AND
• Appropriate conservative management has been tried first e.g. weight reduction where appropriate

.**Background to the condition**

A hernia is defined as a protrusion through a weakness in the abdominal wall of a sac or peritoneum, often containing intestine or other abdominal contents. They usually present as a lump, and patients often experience pain or discomfort that can limit daily activities and the ability to work.[i,ii] In addition, hernias can present as a surgical emergency should the bowel strangulate or become obstructed due to the hernia.

There are many different types of hernia; those that are covered in this policy include inguinal, femoral, umbilical and incisional hernias.

An inguinal hernia is a protrusion of the contents of the abdominal cavity or preperitoneal fat through a hernia defects in the inguinal area. Indirect hernias follow the inguinal canal, whereas direct hernias usually occur due to a defect or weakness in the transversalis fascia are of the Hesselbach triangle. 98% occur in men due to the vulnerability of the male anatomy.i, ii

Femoral hernias follow the tract below the inguinal ligament through the femoral canal, and account for less than 10% of all groin hernias. However, due to the small size of this space through which they protrude, they frequently become incarcerated or strangulated with 40% presenting as emergencies.[iii] The incidence of femoral hernias is higher in women than men, with a ratio of 4:1

The umbilical canal is bordered by the linea alba anteriorly, the umbilical fascia posteriorly and the medial edges of the rectus sheaths bilaterally. Umbilical hernias that go through the umbilicus and those that protrude above or below the umbilical ring (paraumbilical) account for 3-8.5% of all hernias Paraumbilical hernias are five times more common in women[iv]

Incisional hernias are iatrogenic, with protrusion through a defect caused during surgery. They account for 80%[v] of ventral hernia, and may arise from 3-11% of all laparotomies, rising to >23% should wound infection occur. Other predisposing factors include diabetes, smoking and obesity. Again, they can give rise to symptoms such as discomfort or pain.

Approximate frequencies for each type of hernia are:[vi]

- Inguinal = 70-75%
- Femoral 6-17%
- Umbilical 3-8.5%
- Rarer form 1-2% (epigastric/incisional)

Rationale behind the decision

A trial carried out by Fitzgibbons[vii] randomised 720 men to watchful waiting vs surgical repair of their inguinal hernia. It was found that results for these outcomes were similar between watchful waiting and surgical repair at 2 years. Although 23% of patients did cross over to the surgical group due to an increase in symptoms, there was no difference in post op complications between this group and those allocated initially to repair. Over four years only two patients experienced incarceration of their hernia. The study concluded that delaying surgical repair until symptoms increase is safe because acute incarcerations occurred rarely and there was no increase in operative complications. The BMJ clinical evidence team also advocate this approach.[viii] The Danish hernia database[ix] recommend surgical repair in the presence of symptoms affecting daily life. However, in men with minimal or absent symptoms, a watchful waiting approach is recommended.

The European Hernia society[x] advocates a watchful waiting approach for those who are asymptomatic or minimally symptomatic. However, those who are symptomatic should be considered for elective surgery. This approach is also in line with recommendations from other CCGs such as Cambridgeshire and Peterborough, North West London, South Worcestershire and Wyre Forest.

Primatesta[xi] looked at the incidence of elective and emergency surgery, readmission and mortality. He found that patients undergoing emergency hernia repair had worse post-operative outcomes and therefore recommended elective repair of inguinal hernias. In the study by Fitzgibbons patients were operated once symptoms such as pain increased rather than waiting for strangulation.

The case is different for femoral hernia repair surgery. Despite femoral hernias accounting for less than 10% of groin herniasiii, 40% of these present as emergencies with incarceration or strangulation. For these reasons we have recommended that all femoral hernias should be referred for specialist assessment. This view is supported by the Danish hernia database.ix

Friedrich et alv recommend conservative management such as weight reduction in the management of incisional hernia; with surgery to be carried out in patients who are symptomatic and have gained no benefit from conservative measures. The Society for Surgery of the Alimentary Tract[xii,xiii] advise reasons for repairing incisional hernias should include relieving symptoms, prevention of gradual enlargement over time and to avoid incarceration and strangulation of bowel.

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[iii] McIntosh A. Hutchinson A. Roberts A & Withers, H. Evidence-based management of groin hernia in primary care—a systematic review. Family Practice, 2000;17(5), 442-447.

[iv]GP notebook: *Paraumbilical hernias*. Available from: http://www.gpnotebook.co.uk/simplepage.cfm?ID=-1811546097&linkID=17862&cook=no (accessed 16/4/14)

[v] Friedrich M. Müller-Riemenschneider F. Roll S. Kulp W. Vauth C. Greiner W & von der Schulenburg JM. Health Technology Assessment of laparoscopic compared to conventional surgery with and without mesh for incisional hernia repair regarding safety, efficacy and cost-effectiveness. *GMS health technology assessment*. 2008;*4*.

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[vii] Fitzgibbons. Watchful waiting versus repair of inguial hernia in minimally symptomatic men, a randomised controlled trial. *JAMA*: 2006;295, 285-292

[viii] Purkayastha S. Chow A, Anthanasiou T, Tekkis P P & Darzi A. Ingunal hernias. *Clinical evidence, 2008;*0412, 1462-3846

[ix] Rosenberg J. Bisgaard T. Kehlet H. Wara P. Asmussen T. Juul P & Bay-Nielsen M. Danish Hernia Database recommendations for the management of inguinal and femoral hernia in adults. *Dan Med Bull*, 2011;*58*(2), C4243.

[x] Simons M P. Aufenacker T. Bay-Nielsen M. Bouillot J L. Campanelli G. Conze J & Miserez, M. European Hernia Society guidelines on the treatment of inguinal hernia in adult patients. *Hernia*, 2009;*13*(4),343-403.

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[xiii] The Society for Surgery of the Alimentary Tract. *Surgical Repair of Groin Hernias. Available from: http://www.ssat.com/cgi-bin/hernia6.cgi* (Accessed 20/4/2014)