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UNKNOWN FACTS OF HAEMORRHOIDS: A LITERATURE REVIEW

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ABSTRACT

The lining of the anal canal contains three soft, spongy pads of tissue that act as an extra seal to keep the canal closed until you go to the lavatory. The lining of the gut is very slimy (so that faeces can pass along easily); the extra seal stops the slime (mucus) from leaking out. The pads contain a network of tiny blood vessels. What are piles? People sometimes think that piles (haemorrhoids) are like varicose veins of the legs (i.e. a single vein that has become swollen). This is not the case. A pile is one of the soft pads that have slipped downwards slightly, because the surrounding tissue is not holding it in place properly. When this happens, the small blood vessels within the cushion become engorged with blood, so the cushion swells up. When faeces are passed, the pile may be pushed further down the anal canal to the outside, and this is called a prolapsed pile. There are several different operations for piles. In the usual operation, the swollen spongy pad that forms the pile is cut away. It is painful for 7–10 days afterwards. A newer operation, called 'stapling', involves cutting away a 2 cm strip of the lining of the rectum and joining the cut edges with a special stapler. People seem to recover quicker from 'stapling' than from the ordinary operation. It is not yet a common operation in the UK, but it is popular in the rest of Europe. Although it is less painful than the ordinary operation, it seems to be less effective in the long-term, but more research is needed.

KEYWORDS: Anopexy, Haemorrhoids, Treatment

INTRODUCTION

The lining of the anal canal contains three soft, spongy pads of tissue that act as an extra seal to keep the canal closed until you go to the lavatory. The lining of the gut is very slimy; the

extra seal stops the slime (mucus) from leaking out. The pads contain a network of tiny blood vessels. These pads are also important in contributing to one's ability to distinguish between solid, liquid or gas in this area. A pile is one of the soft pads that has slipped downwards slightly, because the surrounding tissue is not holding it in place properly. When this happens, the small blood vessels within the cushion become engorged with blood, so the cushion swells up. When faeces are passed, the pile may be pushed further down the anal canal to the outside, and this is called a prolapsed pile.[1]

Types of Hemorrhoids

Internal and external hemorrhoids may present differently; however, many people may have a combination of the two. Bleeding significant enough to cause anemia is rare, and life-threatening bleeding is even more uncommon. Many people feel embarrassed when facing the problem and frequently seek medical care only when the case is advanced.

External

If not thrombosed, external hemorrhoids may cause few problems. However, when thrombosed, hemorrhoids may be very painful. Nevertheless, this pain typically resolves in 2–3 days. The swelling may, however, take a few weeks to disappear.[2]

Internal

Internal hemorrhoids usually present with painless, bright red rectal bleeding during or following a bowel movement. The blood typically covers the stool (a condition known as hematochezia), is on the toilet paper, or drips into the toilet bowl.[3]

Doctors classify Internal piles into four types.[4]

Grade 1 piles are swollen cushions that always remain within the anal canal; these are painless and the usual symptom is that of bleeding, although in most people they are symptom-free.

Grade 2 piles are pushed down (prolapsed) when faeces are passed, but spontaneously return to their starting position afterwards.

Grade 3 piles are pushed down (prolapsed) when faeces are passed, or come down at other times. They do not go back by themselves but can be pushed back in.

Grade 4 piles are the same but cannot be pushed back in.

Etiology of Piles[5]

Piles can occur at any age, but are more common in older people. They affect both men and women. In fact, most people suffer from piles at some time, but usually they are nothing more than a temporary problem. The exact cause of symptomatic hemorrhoids is unknown. A number of factors are believed to play a role, including: irregular bowel habits (constipation or diarrhea), lack of exercise, nutritional factors (low-fiber diets), increased intra-abdominal pressure (prolonged straining, ascites, an intra-abdominal mass, or pregnancy), genetics, an absence of valves within the hemorrhoidal veins, and aging. Other factors believed to increase risk include obesity, prolonged sitting, a chronic cough, and pelvic floor dysfunction. Evidence for these associations, however, is poor. During pregnancy, pressure from the fetus on the abdomen and hormonal changes cause the hemorrhoidal vessels to enlarge. The birth of the baby also leads to increased intra-abdominal pressures. Pregnant women rarely need surgical treatment, as symptoms usually resolve after delivery.

Pathophysiology of Piles[6]

Piles are usually more common in elderly people and during pregnancy. Researchers are not certain what causes haemorrhoids. "Weak" veins - leading to haemorrhoids and other varicose veins - may be inherited.

It's likely that extreme abdominal pressure causes the veins to swell and become susceptible to irritation. The pressure can be caused by obesity, pregnancy, standing or sitting for long periods, straining on the toilet, coughing, sneezing, vomiting, and holding your breath while straining to do physical labor.

Diet has a pivotal role in causing - and preventing - haemorrhoids. People who consistently eat a high- fiber diet are less likely to get haemorrhoids, but those who prefer a diet high in processed foods are at greater risk of haemorrhoids. A low-fiber diet or inadequate fluid intake can cause constipation, which can contribute to haemorrhoids in two ways: it promotes straining on the toilet and it also aggravates the haemorrhoids by producing hard stools that further irritate the swollen veins.

Symptoms of Piles[7]

The symptoms of haemorrhoids include: Bright red bleeding from the anus. Blood may streak the bowel movement or the toilet paper, Tenderness or pain during bowel movements,

Painful swelling or a lump near the anus, Anal itching, A mucous anal discharge, Rectal bleeding for the first time, even if you believe you have haemorrhoids, Colon polyps, colitis, Crohn's disease, and colorectal cancer can also cause rectal bleeding, excessive haemorrhoidal bleeding can cause anaemia.

Treatment for Piles[8]

First- and second-degree piles usually go away on their own if constipation is avoided, but your doctor may prescribe a short course of haemorrhoid cream to relieve symptoms. Third-degree piles may also go away on their own, but if they persist, they may need treatment. Only a few people need an operation; most are treated by banding or phenol injections. There is usually no need for a general anaesthetic or to stay in hospital overnight for these procedures. A good doctor will initially recommend some lifestyle changes.

Diet - piles can be caused by too much straining when doing bowel movements, which is the result of constipation. A change in diet can help keep the stools regular and soft. This involves eating more fiber, such as fruit and vegetables, or switching your cereal breakfast to bran. Water is the best drink, and the patient may be advised to increase his/her water consumption. Some experts say too much caffeine is not good.

Body weight - if the patient is obese, losing weight may help reduce the incidence and severity of hemorrhoids.

Simple things you can do yourself to help prevent piles:

- Try not to strain when you go to the toilet
- Avoid laxatives
- Exercise.

Ointments, creams, pads and other OTC medications - there are some over-the-counter (OTC) medications which help soothe the redness and swelling around the anus area. Some of them contain witch hazel, hydrocortisone, or some other active ingredient which can relieve symptoms of itching and pain. It is important to remember that they do not cure piles, they only treat the symptoms. Do not use them for more than seven consecutive days - longer periods may irritate the anus area and cause skin thinning. Unless advised to by your doctor, do not use two or more medications simultaneously.

Corticosteroids - these can reduce **inflammation** and pain.

Painkillers - ask your pharmacist for suitable painkilling medications, such as acetaminophen (Tylenol).

Laxatives - the doctor may prescribe one if the patient suffers from constipation.

'Venotonic' drugs are popular treatments for piles in Europe (especially France) and in the Far East. The most common are the so-called 'flavonoid' chemicals such as diosmin, hidrosmin, hesperidin and rutosides.

Banding involves placing a small rubber band at the base of the pile, so that it pinches the lining of the anal canal. This 'strangles' the pile, so it dies and falls off. It causes some scarring. It is more effective than some other treatments but has some drawbacks, such as severe bleeding in a few cases.

Injection of phenol in almond oil is a method of causing scarring in the area, but produces a permanent cure in only about 25% of cases. It is less commonly used now, because the results are not as good as with banding.

Banding and injection are not suitable for larger grade 3 piles or for grade 4 piles.
Direct-current electrotherapy (Ultroid) is a new non-surgical treatment that uses a probe to apply a very low current to the base of the pile for up to 10 minutes.

Cryosurgery freezes the pile to destroy it. It is not used much, because it causes a watery discharge afterwards.

Infrared coagulation uses infrared light to destroy the pile. This method is not commonly used in the UK, because it is not as effective as other methods.

Surgery. For large internal haemorrhoids or extremely uncomfortable external haemorrhoids (such as thrombosed haemorrhoids that are too painful to live with), your doctor may choose traditional surgery, called haemorrhoidectomy. The success rate for haemorrhoid removal approaches 95%, but unless dietary and lifestyle changes are made, haemorrhoids may recur.[9]

Hemorrhoidectomy - the excess tissue that is causing the bleeding is surgically removed. This can be done in various ways. It may involve a combination of a local anesthetic and

sedation, a spinal anesthetic, or a general anesthetic. This type of surgery is the most effective in completely removing piles, but there is a risk of complications, which can include difficulties passing stools, as well as urinary tract infections.[10]

Hemorrhoid stapling[11]- blood flow is blocked to the tissue of the hemorrhoid. This procedure is usually less painful than hemorrhoidectomy. However, there is a greater risk of hemorrhoid recurrence and rectal prolapse (part of the rectum pushes out of the anus). Stapled hemorrhoidectomy is surgical technique for treating hemorrhoids, and is the treatment of choice for third-degree hemorrhoids. Stapled hemorrhoidectomy is a misnomer since the surgery does not remove the hemorrhoids but, rather, the abnormally lax and expanded hemorrhoidal supporting tissue that has allowed the hemorrhoids to prolapse downward.

Technique: For stapled hemorrhoidectomy, a circular, hollow tube is inserted into the anal canal. Through this tube, a suture (a long thread) is placed, actually woven, circumferentially within the anal canal above the internal hemorrhoids. The ends of the suture are brought out of the anus through the hollow tube. The stapler (a disposable instrument with a circular stapling device at the end) is placed through the first hollow tube and the ends of the suture are pulled. Pulling the suture pulls the expanded hemorrhoidal supporting tissue into the jaws of the stapler. The hemorrhoidal cushions are pulled back up into their normal position within the anal canal. The stapler then is fired. When it fires, the stapler cuts off the circumferential ring of expanded hemorrhoidal tissue trapped within the stapler and at the same time staples together the upper and lower edges of the cut tissue.

Who is a good candidate for stapled hemorrhoidectomy?[12]

Stapled hemorrhoidectomy, although it can be used to treat second degree hemorrhoids (hemorrhoids that extend outside the anus with a bowel movement, but return inside), usually is reserved for higher grades of hemorrhoids - third and fourth degree. Third degree hemorrhoids can be pushed back into the anus after a bowel movement. Fourth degree hemorrhoids are always outside. If in addition to internal hemorrhoids there are small external hemorrhoids that are causing a problem, the external hemorrhoids may become less problematic after the stapled hemorrhoidectomy. Another alternative is to do a stapled hemorrhoidectomy and a simple excision of the external hemorrhoids. If the external hemorrhoids are large, a standard surgical hemorrhoidectomy may need to be done to remove both the internal and external hemorrhoids.

What happens to the staples from a stapled hemorrhoidectomy?[13]

During stapled hemorrhoidectomy, the arterial blood vessels that travel within the expanded hemorrhoidal tissue and feed the hemorrhoidal vessels are cut, thereby reducing the blood flow to the hemorrhoidal vessels and reducing the size of the hemorrhoids. During the healing of the cut tissues around the staples, scar tissue forms, and this scar tissue anchors the hemorrhoidal cushions in their normal position higher in the anal canal. The staples are needed only until the tissue heals. After several weeks, they then fall off and pass in the stool unnoticed. Stapled hemorrhoidectomy is designed primarily to treat internal hemorrhoids, but if external hemorrhoids are present, they may be reduced as well.

How long does stapled hemorrhoidectomy take?

Stapled hemorrhoidectomy is faster than traditional hemorrhoidectomy, taking approximately 30 minutes. It is associated with much less pain than traditional hemorrhoidectomy and patients usually return earlier to work. Patients often sense a fullness or pressure within the rectum as if they need to defecate, but this usually resolves within several days. The risks of stapled hemorrhoidectomy include bleeding, infection, anal fissuring (tearing of the lining of the anal canal), narrowing of the anal or rectal wall due to scarring, persistence of internal or external hemorrhoids, and, rarely, trauma to the rectal wall.

Stapled hemorrhoidectomy may be used to treat patients who have both internal and external hemorrhoids; however, it also is an option to combine a stapled hemorrhoidectomy to treat the internal hemorrhoids and a simple resection of the external hemorrhoids.

Prevention of Piles[14]

A healthy diet and lifestyle are good insurance for preventing haemorrhoids, whether you already suffer haemorrhoid symptoms or are intent on preventing them. Regular exercise is also important, especially if you have a sedentary job. Exercise helps in several ways: keeping weight in check, making constipation less likely, and enhancing muscle tone.

Healthy bowel habits also help prevent haemorrhoids. Use the toilet as soon as you feel the urge to do so. Also, avoid sitting on the toilet for prolonged periods (more than five minutes) and avoid straining during a bowel movement.

CONCLUSION

Hemorrhoidal disease is one of the most common anorectal conditions. Non-operative measures, whether medical treatment or office procedures, can be offered to patients with

Grade Ⅰ and Grade Ⅱ hemorrhoids. However, when these measures fail, surgical treatment should be considered. For patients with Grade Ⅲ and Grade Ⅳhemorrhoids, surgical treatment should be offered and tailored to each patient according to the severity of symptoms and the extent of external ano-rectal component, Stapled Hemorrhoidopexy has been found to be a successful and well-tolerated procedure for prolapsing haemorrhoids in the district general hospital setting. Although continued bleeding per rectum was reported in the shortterm post-operative period, recurrence rate and incidence of post-operative pain was low. The rate of satisfaction in patients treated with SH was high.

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