

First Results Surgical Treatment of Patients with Chronic anal Fissure Through Electric Welding of Biological Tissue

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Abstract: Existing methods of ectomy of chronic anal fissure is now accompanied by a fairly large number of postoperative complications such as pain syndrome, breach urine, bleeding, local edema, which leads to additional suffering patient, increases the cost of treatment. The aim is to study the results of treatment of chronic anal fissure through the use of electrocautery generator LigaSure (Covidien) for fissure and vessels that supply blood to them. After dilatation anal sphincters spend revision anal canal. Clip tighten chronic anal fissure from 0,5 to 2,0 cm from anal verge to 3,0 cm on deep recti on top and put on his stretched base, including vascular leg, bent electrode apparatus LigaSure. Spend electric welding grounds unit at intensity 2 or 3 LEDs, after which chronic anal fissure of the clip is removed without firmware vascular legs. Histological research after operation. Applying this method on treatment of 21 patients with a diagnosis of "Chronic anal fissure". Performance ectomy of chronic anal fissure using LigaSure, spread through small areas of damage and no sutures in the anal region, leads to a reduction of pain, no bleeding and swelling of tissue, accelerate wound healing, reduction of terms of treatment and temporary disability. This method is had trauma (zone 300-600 microns of tissue damage, early wound healing) and easy to use that can significantly improve the results of surgery and reduce the number of postoperative complications after ectomy of chronic anal fissure.

Keywords: Surgical treatment, Anal fissure, Electric welding

Introduction

An anal fissure is often caused by a hard or painful bowel movement, which damages the surrounding skin. A fissure can cause a severe or burning pain in or around anus, especially when open in bowels. This pain can last for a couple of hours. May also notice bright red blood on the toilet paper when wipe after a bowel movement.

The opening and closing of anus is controlled by internal (inside) and external (outside) anal sphincter muscles. May be control external anal sphincter, but not internal anal sphincter. If internal anal sphincter goes into spasm (tenses), this reduces the blood supply to fissure and stops it healing properly. A chronic anal fissure likely has the tear, as well as two separate lumps or tags of skin, one internal (sentinel pile) and one external (hypertrophied papilla). The fissure's location offers clues about its cause. A fissure that occurs on the side of the anal opening, rather than the back or front, is more likely to be a sign of another disorder, such as Crohn's disease. Recommended a surgical procedure called partial lateral internal sphincterotomy as the technique of choice for the treatment of anal fissures. In this procedure, the internal anal sphincter is cut starting at its distal most end at the anal verge and extending into the anal canal for a distance equal to that of the fissure.

The cut may extend to the dentate line, but not farther. The sphincter can be divided in a closed (percutaneous) fashion by tunneling under the anoderm or in an open fashion by cutting through the anoderm. The posterior midline, where the fissure usually is located, is avoided for fear of accentuating the posterior weakness of the muscle surrounding the anal canal. Additional weakness posteriorly can lead to what is called a keyhole deformity, so called because the resulting anal canal resembles an old fashioned skeleton key. This deformity promotes soilage and leakage of stool.

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Method

If you have a chronic anal fissure that is resistant to other treatments, or if your symptoms are severe, your doctor may recommend surgery. Doctors usually perform a procedure called lateral internal sphincterotomy, which involves cutting a small portion of the anal sphincter muscle to reduce spasm and pain, and promote healing. Studies have found that for chronic fissure, surgery is much more effective than any medical treatment. However, surgery has a small risk of causing incontinence.

Several surgeons have described procedures that stretch and tear the anal sphincters for the treatment of anal fissures. Though anal stretching often is successful in alleviating pain and healing the fissure, it is a traumatic, uncontrolled disruption of the sphincter. Ultrasonograms of the anal sphincters following stretching demonstrate trauma that extends beyond the desired area. Because only 70-80% of fissures heal and there is a 20% incidence of incontinence of stool, stretching has fallen out of favor.

Our recommendation: After dilatation anal sphincters spend revision anal canal. Clip tighten chronic anal fissure from 0,5 to 2,0 cm from anal verge to 3,0 cm on deep recti on top and put on his stretched base, including vascular leg, bent electrode apparatus LigaSure. Spend electric welding grounds unit at intensity 2 or 3 LEDs, after which chronic anal fissure of the clip is removed without firmware vascular legs. Histological research after operation.

Results and Discussion

Applying this method on treatment of 21 patients with a diagnosis of "Chronic anal fissure". Performance ectomy of chronic anal fissure using LigaSure, spread through small areas of damage and no sutures in the anal region, leads to a reduction of pain, no bleeding and swelling of tissue, accelerate wound healing, reduction of terms of treatment and temporary disability.

The choice of treatment remains difficult for the following reasons. Although surgery is highly efficacious and succeeds in curing the fissure in more than 90% of patients, in a systematic review of randomised surgical trials the overall risk of incontinence was about 10%. This was mostly incontinence to flatus, and there are no reports delineating the duration of this problem (is it permanent or transitory?) Publications describing treatment for incontinence after sphincterotomy for fissure are strikingly absent, implying a lack of need compared with other incontinent populations.

Medical treatment for chronic anal fissure, acute fissure, and fissure in children may therefore be applied with a chance of cure that is only marginally better than placebo. The risk of using such treatments is not great: mainly headache during the use of nitroglycerin ointment, without apparent adverse effect in the long term. Medical treatments can therefore be used in individuals wanting to avoid surgical treatment, and surgery can be reserved for treatment failures in adults with chronic typical fissure. Topical application of calcium channel blockers may be as effective as nitroglycerin ointment in the treatment of anal fissure, without the risk of headache, which many patients find unacceptably painful. Too few studies exist to establish this efficacy.

Would be advantageous if the risk of incontinence could be reduced after surgery or the success rate of medical treatments increased to that found in surgery, but with less risk of headache. The Cochrane reviews provide some direction here but not a quick fix. Anal stretch was found to have a significantly higher risk of incontinence than controlled sphincterotomy in surgical trials and a higher risk of treatment failure. Stretch should probably be abandoned in favour of partial internal sphincterotomy until a better operation is described. Among the medical treatments, calcium channel blockers applied topically caused fewer headaches and may be as efficacious as nitroglycerin ointment.

Traditional surgery that permanently weakens the internal sphincter is associated with a risk of incontinence. Medical therapies temporarily relax the internal sphincter and pose no such danger, but their limited efficacy has

led to displacement rather than replacement of traditional surgery. Emerging medical therapies promise continued improvement and new sphincter-sparing surgery may render traditional surgery redundant.

Conclusion

This method is had trauma (zone 300-600 microns of tissue damage, early wound healing) and easy to use that can significantly improve the results of surgery and reduce the number of postoperative complications after ectomy of chronic anal fissure.

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