

fissure. If the fissure persists over time; it progresses to chronic fissure that can be distinguished by its classic features. The fibers of internal anal sphincter are visible in the base of the chronic fissure and often an enlarged anal skin tag is present distal to the fissure and hypertrophied anal papilla are present in the anal canal proximal to the fissure ⁽²⁾. The diagnosis is secured by the typical history of pain and bleeding with defecation, especially if associated with prior constipation and confirmed by inspection after gently parting the posterior anus. Digital as well as proctoscopic examination may trigger severe pain, interfering with the ability to visualize the ulcer. An endoscopic examination should be performed, but it can be delayed 4 to 6 weeks, until the pain is resolved with medical management or until surgery is performed for those cases refractory to medical therapy ⁽³⁾. Local application of medications to relax the sphincter muscle, thus allowing the healing to proceed, was first proposed in 1994 with nitroglycerine ointment ⁽⁴⁻⁷⁾, and then calcium channel blockers in 1999 with nifedipine ointment ^(8,9), and the following year with topical diltiazem ⁽¹⁰⁾. Branded preparations are now available of topical nitroglycerine ointment (Rectogesic (Rectiv) as 0.2% in Australia and 0.4% in UK and US) ⁽¹¹⁾, topical nifedipine 0.3% with lidocaine 1.5% ointment (Antrolin in Italy since April 2004) and diltiazem 2% (Anoheal in UK, although still in Phase III development). A common side effect drawback of nitroglycerine ointment is headache, caused by systemic absorption of the drug, which limits patient acceptability.

A combined surgical and pharmacological treatment, administered by colorectal surgeons, is direct injection of botulinum toxin (Botox) into the anal sphincter to relax it. This treatment was first investigated in 1993. However it must be noted that, in many cases involving Botox injections the patients eventually had to choose another cure as the injections proved less and less potent, spending thousands of dollars in the meantime for a partial cure. Lateral sphincterotomy is the Gold Standard for curing

this affliction ⁽¹²⁾. Combination of medical therapies may offer up to 98% cure rates ⁽¹³⁾.

Surgical procedures are generally reserved for people with anal fissure who have tried medical therapy for at least one to three months and have not healed. It is not the first option in treatment.

The main concern with surgery is the development of anal incontinence. Anal incontinence can include inability to control gas, mild fecal soiling, or loss of solid stool. Some degree of incontinence can occur in up to 45 percent of patients in the immediate surgical recovery period. However, incontinence is rarely permanent and is usually mild. The risk should be discussed between the surgeon and patient.

Surgical treatment, under general anesthesia, was either anal stretch (Lord's operation) or lateral sphincterotomy where the internal anal sphincter muscle is incised. Both operations aim to decrease sphincter spasm and thereby restore normal blood supply to the anal mucosa. Surgical operations involve a general anesthetic and can be painful postoperatively. Anal stretch is also associated with anal incontinence in a small proportion of cases and thus sphincterotomy is the operation of choice ⁽¹⁴⁾.

Methods

This prospective study has been done for evaluation of 250 female patients with fissure in ano attending three hospitals in Baghdad: the general surgery clinic Al-Imamian Al-Kadhimiyan Medical City, Al-Thurgham Private Hospital and Al-Kadhimiya Private Hospital from May 2008 to May 2011. All of them were diagnosed clinically by taking a complete history and physical examination. The history included: patient's age, marital state, numbers of child births, the address, the occupation, type of fissure in ano and its location.

Results

One hundred (40%) female patients were aged between 21 and 30 year. The age range was 1 to 51 years. The highest percentage of women was married (76.8%). The highest percentage of