ANAL FISTULAS

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WHAT ARE THEY?

Anal abscesses represent the acute phase of an infection that is caused by the excretion of mucus from the microscopic glands that are present among the sphincters or among the muscles that are around and close to the anus. Anal fistulas represent the chronic phase of such infection. Abscesses and fistulas are therefore two stages of the same disorder.

HOW DO THEY FORM?

When the glands that are between the sphincters get inflamed, almost always due to the passage
of germs from stools, a collection of pus forms (anal abscess) which develops towards the skin that covers the anus and that can outflow spontaneously or require a surgical excision in order to be empted. This canal through which the pus has passed can persist and the external orifice, near to the anus, can remain open (anal fistula).

WHAT ARE THE SYMPTOMS?

In the phase of abscess:

1. Swelling, heat and redness of the skin.
2. Intense anal pain, also at night.
3. Often a light increase of temperature.
4. At times, difficulty to pass urine.

Fistulas appear with a continuous or intermittent secretion of serum-pus through the external orifice situated near the anus, and do not tend to heal.

HOW ARE THEY STUDIED?

Currently there is some pre-operating research, which gives the surgeon a clear picture of the
complexity of the fistula and therefore of the possible technical difficulties linked to surgery.
Endoanal ultrasonography with rotating probe, helps visualize precisely the spreading of the infection in relation to the sphincters.
Anorectal manometry measures the pressure at the different levels of the anal canal, and is useful TO evaluate the risk of incontinence both in operations on complex fistulas and in patients who have already undergone anal surgery or with previous perineal traumatism caused by childbirth.

CAN THEY DEGENERATE?

When a fistula persists for many years, without surgical intervention, it can degenerate, even if this occurs rarely, into a malignant tumor. Persistent Chronic inflammation of the tissues can rarely cause a neoplasia.

HOW ARE THEY TREATED?

If the anal abscess doesn't open spontaneously, it is necessary to drain it; by making a small excision which can be carried out in a doctor's surgery in local anaesthesia.
Antibiotics must be used in the acute phase, only in elderly patients or for the immune depressed.
When the abscess is followed by the formation of a fistula, it must be operated generally in loco- regional anaesthesia or total anaesthesia in one or more surgical steps depending on

whether the anal muscles are involved more or less profoundly in the fistula tract. The approach of the colon proctologist must not be too aggressive, in order to avoid the risk of sectioning an excessive part of the sphincter causing faecal incontinence. On the other hand the surgeon must not be too cautious in order to avoid the risk of incomplete ablation of the root of the fistula, which could favour relapses.
The objective therefore is to heal the fistula and maintain continence. The majority of patients maintain perfect continence. Only in 8-11% of patients, surgery of complex fistulas can involve different grades of incontinence that varies between gas and liquid stools.
For this reason patient with fistulas that are seated higher and in particular in the anteriors ones in females, risk post-operational incontinence. The "Advancement flap "technique can also be adopted to prevent postoperative incontinence: without sectioning the external component of the muscle, after removal of the internal focus where the fistula originated, the area is covered with a flap formed by mucosa and fibre of the internal muscle. This will gradually heal closing the fistula's passage.
In recent years two new conservative techniques have been proposed for the treatment of fistulas that are complex or seated highly. These two techniques have a common objective other than the eradication of the fistula itself: to maintain continence and to avoid the deformation of the scar which at times, is an inevitable consequence of fistulectomy and can cause damage to the anatomic structure of the anus and to its functionality.
These techniques are:

- ***INJECTION OF A FIBRIN GLUE INTO THE FISTULA***

This technique makes use of the activation of thrombin to form a clot of fibrin that mechanically closes the fistula. It is preceded by placing in the passage a seton which is made up of one or more silk or synthetic threads that drain or clean the fistula by gradually eliminating possible recesses that contain pus. The seton is kept there for some months and removed before injecting ~~a~~ the fibrin glue. In about 50% 0f cases by means of this technique, the fistula heals without further intervention. In unsuccessful cases there are no implications on further surgical intervention.

- ***INSERTION OF A BIOLOGICAL PLUG IN THE FISTULA***

Such "plug" which measures 2cm x 3 is made up of lyophilized sub mucosa of the intestine of pigs. Its shape is that of a cone and is inserted in the anal fistula after an adequate period of drainage by means of seton. It does not behave as a foreign body and integrates into the patient's tissues within three months. Successful cases vary between 40% and 60 %.

An objective judgement on the use of these two techniques can be made only after checking, after a spell, the majority of cases treated. The scarce invasive character of both methods makes up for what is still their experimental nature.

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