

SURGICAL DECISIONS IN ANAL RECTAL CROHN'S DISEASE

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Introduction: Anorectal lesions are most frequent in Crohn's disease. However valid epidemiological data are not available. It is estimated that overall round about 40% of all diseased people will suffer from anorectal manifestations. The possibility, to develop anorectal symptoms, depends on the site of the main intestinal infection. It increases from 20 %, if only the small intestine is involved, to 40 % in ileocolic disease, more than 60 % in distal colonic manifestation and almost 100 % in rectal illness. Moreover in 10 to 15 % anal manifestation is the first sign of disease, proceeding the intestinal outbreak from months or even several years. The severity of anorectal lesions, too, is related to the site of the intestinal location, the more distal the more complex they are.

Morphological appearance

The far most dominant lesions are fistulas and abscesses. The morphology of fistula is wide spread from superficial clinically mostly inapparent subcutaneous forms to very complex fistulous systems extending to the gluteal, inguinal, femoral or even abdominal region. The more complex they are, the more often they will form painful abscesses and expand via spontaneous or surgical drainage by new fistulous tracks. However although these forms seem chaotic, there are still certain rules, which will lead to adequate surgical intervention:

- Even in Crohn's disease the majority of infections follows a crypto-glandular pathway, as known from ordinary anal fistula, especially if the distal colorectum is free of disease. These I call fistula with Crohn's disease, whereas the following ones may be called Crohn's fistula, especially as most of them histologically offer the characteristic signs of Crohn's inflammation: epithelioid granulomas.
- The peripheral spread is almost superficial, imitating a fistulous pyoderma.
- Even very complex systems originate from one, seldom two or three central abscesses, located in the immediate neighbourhood of the primary ano-rectal Crohn-lesion.
- Most of these abscesses are located in the ischio-rectal fossa, the primary lesion situated at or a little bit of the dentate line, not seldom associated with a circumscribed anorectal stenosis.
- If in women central abscess develops perineally, its depth induces drainage pathways to the vulva misleading to the diagnosis of Bartholinitis, or more often to vaginal fistulas. These forms are regularly accompanied by mild to severe anorectal stenosis.
- Pelvic abscess is more often induced by ascension of incompetent drained ischio-rectal abscess than primary pelvic origin. If there is primary pelvic infection it mainly results from severe rectal manifestations, but occasionally from fistulous ileitis or - more seldom - from sigmoiditis.

Besides fistulas and the already mentioned very typical stenosis we observe ulcers - the term "fissure" should be avoided, because it may induce false therapeutical decisions - the border of these ulcers often undermined with a tendency to putride retention and thereby forming shorttracked superficial fistulas, furthermore tags, sometimes eaching very giant forms, and various manifestations of dermatitis. Occasionally cancer will originate within fistulas - none of the cases, I've seen until now, was diagnosed clinically! Cancer can develop very shortly, in one case within duration of fistula shorter than one year in a 22 years old woman, so that it may be possible, that cancer may be the first and fistula developed on the condition of cancer.

There seem to be constitutional signs for developing anal lesions, because these patients have a very short anal canal, the

anoderma not exceeding 1 cm, and a reduced internal sphincter. The integument appears very soft, almost frail, lividly discoloured.

Local surgical procedures

Predominant aims of surgical interventions are:

- local control of infection and - even by this -
- preservation of continence function.

Local control primarily does not intend to eliminate the fistula at all means. What is causing complaints, is the insufficient drainage of periano-rectal infection. However, all inflamed perianorectal tissue can be removed surgically. What is to be done with the transmural part of the fistula is a second question, the answer of which concerned into the relation to the anal sphincters. If it passes below the middle of the anal canal, you can lay it open too and more than 90 % of these fistula will heal completely. If it is above, you will place a seton drainage. Thereby you will have complete control of infection. What should be done with the remaining part of the fistula, is the third question.

This procedure demonstrates two severe differences to ordinary fistula-surgery:

1) It is not as radical, as you have to respect a greater part of the sphincter, because as Crohn's patients are always in danger to suffer from diarrhoe, it is necessary, that the remaining sphincter portion is able to control.

2) Local control of infection is unavoidable to prevent secondary sphincter damage by the infection itself. In this context Alexander-Williams is often cited, that incontinence in Crohn's disease is not due to aggressive disease, but aggressive surgeons. This may result, if you neglect my first conclusion, but it is incorrect in its first appointment. Crohn's disease is a destructive disease, and meanwhile I know a lot of patients, who have incontinence because of insufficient local control, and the more others, who preserved continence on account of adequate surgery.

On the other hand, this shows the ongoing dilemma in Crohn's disease, because you are unable to cure it. This leads to the answer of the third question. As it is so, you never will be successful with fistuloplasty. Even if you have complete remission under the protection of a stoma and the fistula cured under these circumstances, it will relapse soon after removal of the stoma. Therefore I never arrange a stoma only on account of a fistula. To my opinion there are only two indications to establish a stoma in ano-rectal Crohn's disease:

- severe rectal manifestations in patients, who desire to take even the most inferior chance to preserve the natural pathways, but I know only very few, where it has been successful and than mostly for a shorter period.

- Patients, who already have sphincter damage and will need difficult reconstruction procedures to regain continence function, and this under the condition, that the rectum is free of disease and the anorectal lesions are completely healed.

If I do a fistuloplasty despite of these considerations, I do in cases, who have severe complaints of false-ways-production especially in large recto-vaginal fistulas, and I do primary in the hope, not to heal the fistula, even if it may happen for some times and for a while, but to reduce the diameter of the fistula, so that false-way production would not be a greater problem further-more.

So as you cannot heal Crohn's disease, in other words, if you can't beat it, than peace it. That is, to transforme the lesion from a painful one to one of no or even minor complaints. This means to accept a residual fistula, which has become so scar-

red or - better - has got an epithelial overleaf, so that is unable to expand again. Using the method of excisional drainage, You have to calculate duration of the seton-drainage for at least 1/2 to 1 year. Such a remaining fistula will than almost be a cosmetical rather than a pathological defect.

Decisions in intestinal and anal disease

The main question is, what is prior to the behaviorship of the patient. Relationship of one to another is only loose: removing the intestinal lesion will not automatically improve the anorectal. On the other hand, if in a wide-spread ano-rectal manifestation you get control over the infection, the patients may considerably recover in general. Nethertheless the intestinal lesion is superior to the anal. Than you have to decide, wether it could be managed conservatively or has to been operated on.

- If there is a conservative option, than you should manage the fistula as described above.
- If surgery is unavoidable for the intestinal manifestation, an inactive fistula may be left behind, but if it is pruride, you should use the time of preparation for the operation to do excisional drainage. Preparation means functional exclusion of the bowel by parenteral nutrition for at least 2, better 4 weeks (or even longer, if necessary).

The next question is that of extension of intestinal disease.

- If you have ileitis alone, than there are merely no problems.
- If you have colitis, but the rectum is free, than resect the colon, but leave the rectum behind blindly closed and establish a terminal ileostomy according a Hartmann's procedure. This total exclusion of the anorectum will give a good chance to overcome with the anal lesions. Having control over the periano-rectal infection the presence of a residual sufficiently drained fistula does not hinder restoration of

fecal passage. To have sufficient function in number and quality of stools as continence as well, You will need round about 15 cm of a disease-free rectum.

- If the rectum is affected too, than you have really no chance to preserve continence. Than you shall do a subtotal proctocolectomy, cutting down the rectum to the level of the fistulas, but leave anus and distal rectal stump behind, once to diminish the surgical trauma, but mainly to prevent expansion of the fistulous infection to the abdominally cavity. But tend to leave only a very little rest of rectum, which may be extirped perineally later on without reentering the abdomen.
- Whether the remaining stump has to be removed later-on, depends on development of disease in this region. If it becomes inactive by exclusion, you can wait and see. You have to regard that in case of necessity of rectal excision these wounds have to be left open and very often show great disadvantages in healing, sometimes persisting for several years. So rectal excision should be restricted to cases with ongoing severe complaints.

Conclusion

Dealing with anorectal manifestation of Crohn's disease needs great experience. Although there are certain rules in development of disease and its stage-adjusted therapy, cases are very individual and extension of disease often exhibits during operation at first. Furthermore the concomitant intestinal manifestation has to be taken into therapeutical considerations, resulting in a complex schedule of decisions. Finally you are confronted with a disease, which is incurable untill today. So concerning anorectal lesions we learned again, what we already knew from intestinal lesion, that minimal surgery is superior to aggressive, this means in an final conclusion: the surgical task is to eliminate those alterations, which are due to complaints, but may leave behind residual disease, a patient will overcome with.