

## PATIENT SELECTION AND TECHNICAL OPTIONS IN THE SURGICAL TREATMENT OF RECTAL PROLAPSE

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### TOPIC: SURGERY OF RECTAL PROLAPSE

**AIM:** The selection of patients for surgical treatment of rectal prolapse and the choice of the most appropriate technical option are difficult tasks. The different approaches are based upon patients' age, co-morbidities, sex, size of prolapse, associated incontinence or constipation. However, recent Cochrane analysis of the literature failed to detect a clinically relevant evidence favouring one of those different surgical techniques for the treatment of rectal prolapse(1).

In addition, the only European randomized prospective controlled trial, comparing Delorme operation, Altemeier perineal resection, Rectopexy and Resection/Rectopexy, could not find significant differences in terms of morbidity, mortality, improvement of incontinence or constipation, quality of life and recurrence (2). Therefore without a clear-cut support by literature, a pragmatic approach applying common sense and experience is needed.

### MATERIAL AND METHODS:

In the surgical treatment of rectal prolapse, the main landmark is represented by abdominal or perineal operation. The former is preferred for young fit patients with the abdominal rectopexy associated to sigmoid resection in case of severe constipation. Perineal approach is preferred for aged patients with associated co-morbidities and for smaller prolapse, up to 5-7 cm.

Perineal surgical technique may be bunching up (Delorme) or resecting (Altemeier) the prolapse. In both cases, association with posterior levatorplasty improves the results in terms of continence and incidence of post-operative recurrence.

In our experience, between 1989 and 2016, we treated 49 patients (2 males) affected by complete rectal prolapse. Incontinence was reported by 87% of patients, constipation by 46%.

We performed Delorme operation in 37 pts with associated levatorplasty in 19.

Resection-rectopexy was employed in 11 patients, simple-rectopexy was performed in one case only.

Internal rectal prolapse causing obstructed defecation is managed successfully, after careful patient selection, by means of stapled procedures (S.T.A.R.R. or Trans- S.T.A.R.R.). However, there is a not negligible role for alternative methods such as Block or Internal Delorme.

In the period 1989-2016, we observed 252 patients (24 males) affected by internal rectal prolapse causing obstructed defecation. We performed 16 Block's operation, 12 Rubber banding of anterior mucosal prolapse, 52 S.T.A.R.R. and 4 Trans- S.T.A.R.R..

## **RESULTS:**

In the surgical treatment of complete rectal prolapse, we observed 2 recurrences in the Delorme group and 1 recurrence in the resection-rectopexy group. The former were treated by abdominal resection-rectopexy, the latter with a Delorme operation.

Morbidity was nil, mortality was nil, incontinence improved in all patients treated by resection/rectopexy and in 21 of the Delorme group.

Results of treatment of internal rectal prolapse were satisfactory too since Wexner obstructed constipation score improved significantly from 26 to 4 (mean values;  $p < 0.02$ ). Similarly mean values of satisfaction scale changed from 14 to 5.2 ( $p < 0.02$ ).

Two newly available mini-invasive techniques have to be mentioned: laparoscopic, prosthetic mesh, ventral rectopexy and perineal stapled resection. The former shows satisfactory results in terms of morbidity, mortality, recurrence but carries out the occurrence of mesh related complication (3). Perineal stapled prolapse resection by using stapling devices, makes the perineal resection of prolapsed rectum easier and faster than conventional techniques and certainly very standardized (4). However, recent data show a high recurrence rate at a short follow-up (5).

## **CONCLUSIONS:**

The approach to a patient with overt rectal prolapse remains very controversial. On the contrary, in the management of internal rectal prolapse causing obstructed defecation, the technical choices seem rather standardized. Interestingly, in a recent international survey, 391 surgeons in 50 countries answered to a questionnaire, putting in evidence a dichotomous approach between Europe and the USA (6). In case of complete rectal prolapse, the young healthy patient is a candidate to a laparoscopic ventral rectopexy in Europe whereas in the USA a laparoscopic resection rectopexy would be chosen.

An old risky patient would be selected to a perineal procedure in both geographical areas. In case of internal rectal prolapse with obstructive defecation syndrome, S.T.A.R.R. and Trans- S.T.A.R.R. would be the procedures of choice in Europe in contrast with laparoscopic resection/rectopexy in USA. Nevertheless we are waiting for definitive answers to many open questions about surgery of rectal prolapse, thus large studies and longer follow-up are needed.

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## DATI ABSTRACT

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