

## Correspondence

# Abdominal resection rectopexy versus Delorme's procedure for rectal prolapse: a predictable outcome

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Dear Sir,

Some data of the physiological changes 6 months after abdominal resection rectopexy (ARR) or Delorme's procedure (DP) for rectal prolapse were recently reported in this journal by Chow and Ho [1]. Although no significant differences could be demonstrated (less than 10 patients in each group), there was a trend towards improved anal pressures with preserved rectal compliance after ARR. Clinically four patients were (remained?) constipated in each group (an incidence of almost 50%), whereas no patient was or became incontinent. The latter is somewhat surprising. Indeed, many patients are incontinent or have reduced sphincter function before operation, and the functional changes induced by DP will not improve continence. In contrast, reduced rectal reservoir function could induce or accentuate urgency or urge incontinence, especially since sphincter function does not 'normalise' after this procedure.

In view of the renewed interest in DP, this procedure was introduced in our surgical practice in 1990. Recently we reviewed the results in 44 consecutive patients who underwent rectopexy (30 patients) or DP (14 patients) for full thickness rectal prolapse. Recurrence was observed in 2/30 rectopexis and in 3/14 Delormes. The functional outcome after both surgical procedures was comparable at 6 months, 1 year and last follow-up (6.5 and 2.5 years, respectively). Incontinence improved more after rectopexy (6/15) than after Delorme (0/10;  $P=0.05$ ). Conversely, an adverse effect on continence was observed more frequently after Delorme (7/10) than after rectopexy (3/21;  $P<0.005$ ). After rectopexy four patients became constipated: one slow colon transit constipation and three difficult evacuation. These problems were not observed after Delorme's procedure.

Anal manometry was performed preoperatively in all patients. There was no difference between both patient groups. Manometry was repeated after 8–18 months in 5 patients of each group mainly when indicated on a clinical basis. After rectopexy one patient presented persisting evacuation difficulties, one patient remained incontinent,

**Table 1.** Manometric data before and after rectopexy or Delorme's procedure

	Preoperative (n=10)	Rectopexy (n=5)	Delorme (n=5)
Max. anal basal pressure (mmHg)	47±9	58±15	42±9
Max. squeeze pressure (mmHg)	111±19	122±39	127±19
First Sensation Volume (ml)	66±12	107±52	55±23
Max. Tolerable (or Retainable) Volume (ml)	225±47	277±44	118±47
MTV or MRV – FSV (ml)	153±43	170±66	72±36
Compliance (ml/mmHg)	5.7±1.3	5.2±1.4	2.7±1.5

Values are mean (SEM)

another developed slow colon transit constipation while faecal urge incontinence persisted and two patients were asymptomatic. After DP four patients presented with an increased degree of incontinence and one was asymptomatic. Anal basal and squeeze pressure values did not change after either procedure. In contrast, sensation volumes, incremental volume (MTV or MRV – FSV), rectal capacity and compliance were reduced after DP, while they slightly improved or remained constant after rectopexy (Table 1; preoperative data are limited to postoperatively controlled patients).

In this report as well as in that of Chow et al. [1], too few patient data were entered for differences to reach a statistical level of significance. However, our manometric findings are remarkably comparable with those of Chow et al. as well as the trends observed after DP. Others have also reported decreased rectal sensation volumes and compliance after DP [2].

While all physiological observations indicate a reduced rectal reservoir function after DP, improved incontinence has been reported in 50–86% after this

procedure [3–6]. In contrast, our clinical results after DP were disappointing. We therefore cannot advocate DP as a procedure of choice or first line procedure for rectal prolapse. In our opinion DP is contraindicated in patients with sphincter insufficiency since it may aggravate/induce incontinence due to reduced rectal compliance/capacity and incremental volume from first till maximum tolerable sensation. The latter has clearly been related to the degree of (in)continence [7, 8]. We cannot explain the discordance between physiological and clinical reports after DP in the literature, except for the fact that physiological assessment is mostly performed by researchers who may well apply a different definition and have another concept of continence than the (biased?) clinician.

Chow et al. [1] suggested that controlled randomised prospective trials comparing ARR and DP are needed. The outcome of such a trial however is predictable: on the basis of its nature and the functional changes induced, DP will come out as the worst procedure. Instead of putting anorectal continence of one half of the patients at risk, we feel that it would be of greater interest to randomise between abdominal rectopexy alone and ARR. Rectopexy with sigmoidectomy or colectomy has been advocated as the procedure of choice in constipated patients presenting rectal prolapse, but may be complicated by incontinence in up to 75%, eventually requiring a stoma [9]. Thus, it seems to be wise to limit the resection to the ‘redundant’ sigmoid colon. Finally, it would be most logic if only subjectively or objectively constipated patients would be randomised in such a trial. Frankly incontinent should be excluded and treated by rectopexy alone, eventually followed by sphincter repair or supplementation after 6 months.

## References

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Yours faithfully,

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