Reviewer’s report

Title: Altemeier operation associated with dynamic graciloplasty: a case report

Version: 3 Date: 16 September 2008

Reviewer: Franc H Hetzer

Which of the following best describes what type of case report this is?: New associations or variations in disease processes

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: No

Is the case report persuasive?: No

Does the case report have explanatory value?: No

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

The case report describes the combination of rectal transperineal prolapse resection with a restorative procedure in a patient with a rectal prolapse and fecal incontinence. Twelve months after the complicated procedures, the protecting colostomy was closed and at the final follow-up 2 years later, the author reported no sign of recurrent prolapse and acceptable continence.

Major Criticism

The strength of the report is the well structured shape and the midterm follow-up. However, there are some major considerations.

First, the authors claim that after Altemeier’s surgical procedure for rectal prolapse, 22% - 56% of the patients remain fecally incontinent. They therefore recommend a combination of the rectal prolapse operation with a complicated
neosphincter procedure. In so doing, 44% - 78% of patients who would become continent after the Altemeier procedure without any additional surgery underwent an unnecessary neosphincter procedure. The dynamic graciloplasty as performed in this study as a neosphincter procedure has a high morbidity rate of about 30% and the success rate is about 60% (Chapmann et al Br J Surg. 2002;89:138-53). In addition, the quality of life is similar to patients with a colostomy for severe fecal incontinence (Tillin et al Br J Surg. 2006;93:1402-10). This is one reason why the indication for the dynamic graciloplasty procedure has to be made very selectively and restrictively.

Second, the definition of “irreversible neuromuscular” damage to the sphincter in this patient needs to be clearly defined. We know from the sacral neuromodulation treatment that pudendal neuropathy does not significantly influence the outcome of chronic stimulation.

In my experience, over 50% of patients with rectal prolapse and fecal incontinence will become continent after prolapse surgery. In cases with persistent fecal incontinence, medical therapy and biofeedback six months after rectal prolapse correction, a restorative surgery should be discussed. So in an elderly patient with a morphological intact anal sphincter, sacral nerve stimulation would be the first choice because it is minimally invasive and this procedure has low morbidity. Furthermore, the effect of sacral nerve modulation can be predicted by a percutaneous nerve evaluation test. The overall success rate of this procedure is higher – about 60%-80% – and the costs are significantly lower compared to the dynamic graciloplasty.

Minor Criticism

Introduction:

“Irreversible neuromuscular damage” needs to be clearly defined.

Case Presentation:

Results from pre- and post-operative anal manometry and from a validated incontinence score would improve the scientific value of the study.

Figure 1: The quality of the blood image is poor. With no description it is difficult for a reader unfamiliar with this technique to understand what is being presented. Maybe a schematic drawing would be better.

Figure 2: An explanatory legend is also missing. The muscle is very dark distally....

The gracilis muscle was tunneled and wrapped around “the sigmoid colon anatomized to the residual rectum”, fixing..... better around “the coloanal anastomosis”...

Need for clarification: The leads connecting the neurostimulator to the gracilis-muscle electrodes were then tunneled subcutaneously. What are the leads and what are the electrodes? Are these not the same or was an extension
used?

Why was the colostomy closed so late? Perianal wound healing is normally completed after 3-4 weeks and muscle conditioning after 2 to 3 months.

Data about the type of stimulator and electrodes are missing.

Discussion

The discussion is probably too long.

Delete “dynamic” in: The clinical results of “dynamic” graciloplasty were later improved by implanting a pacemaker device to stimulate the gracilis muscle electrically. Because the “dynamization” of the muscle is done by stimulation with a neurostimulator.

Are anal pressures of 56 to 95 mmHg in this patient discussed and at what follow-up time?

**Quality of written English:** Needs some language corrections before being published

**Declaration of competing interests:**

I declare I have no competing interests