cutting procedures, is caused by denervation. Excessive dilatation of the anal canal by an anal retractor may well be the causative factor. Application of pelvic floor electromyography before sphincter repair is therefore mandatory.

This study also demonstrates that the ability to retain feces is based on external sphincter function. A 40 percent decrease of mean squeeze pressure led to insufficiency, and an 80 percent decrease led to incontinence, which was statistically significant. Furthermore, an external sphincter lesion, as in obstetric trauma, leads to fecal incontinence. Ninety-seven percent of our patients with an obstetric external sphincter lesion complained of incontinence, and continence is restored only when external sphincter repair is performed, provided denervation does not coexist. A third argument is that a rather precise description of an incontinent external sphincter function could be provided: an external sphincter function causing a pressure increase during straining of 5 kPa or less in a patient complaining of a retention disorder is an indication for surgical repair. It is obvious, therefore, that the puborectalis sling does not play an important role in the ability to retain feces. However, when the pelvic floor becomes denervated and the anorectal angle increases, the feeling of urge becomes absent and prolapses occur. We presume, therefore, that the function of the puborectalis sling, a thick muscle compared with the thin levator plate, is to create and to maintain, by persistent slight activity, the anorectal angle in order to bring feces into contact with the levator to evoke the feeling of urge, and to support intra-abdominal contents. The fact that 20 percent of patients with iatrogenic incontinence developed some form of prolapse afterward supports this theory.

Manometry is a suitable procedure for assessing anal sphincter function.[1] It has provided valuable information on which several of our basic concepts of anorectal physiology are based, but there is a huge overlap in squeeze pressures between controls and patients with retention disorders. Patients with low pressures may be continent, whereas higher pressures do not guarantee fecal continence. Anal manometry is indeed a suitable technique for determining anal sphincter functions, but the presence of a retention disorder cannot definitely be determined. The explanation is that the mechanism of continence consists of several factors, and that impaired function of one of these factors may be compensated for by combined function of other factors. The main clinical indication for anal manometry with respect to retention disorders, therefore, remains under discussion.

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Erratum

In the December issue (*Diseases of the Colon & Rectum* 1989;32:1082), a book review was incorrectly attributed to Dr. Richard P. Billingham. The review of the book, *Alimentary Tract Radiology, 4th Ed.*, should have been attributed to Dr. David C. Dwyer, Department of Radiology, Swedish Hospital Medical Center, Seattle, Washington.