



Towards the understanding of the mechanisms of faecal incontinence

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Disorders of anorectal function account for 10% of patients seeking medical care in gastrointestinal clinics. They represent a spectrum of problems that include organic diseases and function disturbances. Owing to inadequate knowledge and lack of appropriate diagnostic methods, until recently, these problems were largely neglected. However, extensive research in the last two decades together with the availability of a wide range of tests has now facilitated a better understanding of these problems^[1]. An ideal test should identify the underlying cause(s) and provide guidelines for treatment. Unfortunately, there is no single test^[2]. Several techniques are available that could provide comprehensive information regarding defaecation dynamics.

To evaluate anorectal function and its controls comprehensively each component of the continence mechanism should be assessed and it is therefore essential to utilise a number of techniques. While static measurements of anorectal motility can be performed quickly, these may not be representative of anorectal motility under ambula-

tory conditions or during sleep^[3].

Combined measurement of anorectal pressure, sphincter electromyography and rectal sensation reveals many causes of defaecation^[1]. In patients with faecal incontinence, anal endosonography may localise the sphincter defect^[4] and aid surgical reconstruction. Pudendal nerve latency test may provide pathophysiological basis for a weak anal sphincter. Saline continent test is useful not only for the diagnosis but for followup. Several tests are available, but choosing the appropriate test would depend on the patients' symptoms and physical findings.

Faecal incontinence may result from increased colorectal motility, reduced strength of the internal anal sphincter (IAS) or external anal sphincter (EAS), decreased rectal compliance, impaired rectal sensation, or a combination of these factors^[6,7]. In our series of 302 patients with "idiopathic" faecal incontinence, 92% had a weak EAS, 32% had a weak IAS, 27% had an unstable IAS (characterised by prolonged "spontaneous" anal relaxation), 47% had a hypersensitive rectum, and rectal sensation was impaired in 8%^[9].

In summary, ideally, the clinician should utilise these tests either to confirm a clinical suspicion or to provide new information that could aid management.

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