

## **SUMMARY AND CONCLUSIONS**

Fecal incontinence is a common multifactorial disorder. Major causes of faecal incontinence are related to vaginal delivery and prior anorectal surgery. In addition to medical history and physical examination, several anorectal functional tests and imaging techniques can be used to assess the underlying pathophysiology and to guide treatment planning in faecal incontinent patients.

Anorectal functional tests provide functional information, but the potential strength comes from combining test results. Imaging techniques, including defecography, endoanal sonography, and magnetic resonance (MR) imaging, provide structural information about the anorectal region with a direct clinical impact.

Defecography is mainly performed in patients with constipation. Patients with obstructed defecation may encounter faecal incontinence complaints (e.g. overflow incontinence, post-defecation leakage). In these patients, defecography is useful to visualize an outlet obstruction due to an anatomical or a functional cause.

Endoanal sonography is an endoluminal technique that yields images of high contrast resolution. This technique made sphincter imaging for the first time possible and emphasized the

significant role of obstetric anal sphincter trauma in developing fecal incontinence complaints.

The major advantage of endoanal MR imaging is the accurate demonstration of external anal sphincter atrophy. Recent studies reported that external phased array MR imaging and three dimensional endoanal sonography can be used as alternative techniques to demonstrate anal sphincter pathology.