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**Combined MRI, high-resolution manometry and a randomised trial of bisacodyl versus hyoscine show the significance of an enlarged colon in constipation: the RECLAIM study**

Wilkinson-Smith V, Scott M, Menys A, *et al.* Combined MRI, high-resolution manometry and a randomised trial of bisacodyl versus hyoscine show the significance of an enlarged colon in constipation: the RECLAIM study. *Gut* 2025; 74: 35-44.doi: 10.1136/gutjnl-2024-332755.

With a view to optimising the management of constipation, functional constipation (FC) has been differentiated from irritable bowel syndrome with constipation (IBS-C) in recent years by Rome IV criteria. In addition, the interplay of delayed gut transit (secondary to dysmotility), evacuatory dysfunction, and sensory dysfunction in constipation’s pathophysiology is increasingly recognised. However, treatment for constipation remains suboptimal at present.

Given their complexity, functional tests such as manometry and barostat are infrequently performed; whilst, more commonly utilised assessment modalities like scintigraphy and radio-opaque markers chiefly only evaluate transit. MRI has previously been utilised in constipation as a tool to evaluate motor response through the proxy measurement of colonic volume (CV), but has yet to be widely adopted in practice, despite potentially representing a means of assessing multiple pathophysiological parameters simultaneously and conveniently.

This study, conducted at two UK centres, included 124 individuals (37 FC, 44 IBS-C and 43 healthy volunteers) asked to provide stool diaries and questionnaires, before firstly undergoing (post-oral macrogol) assessment by MRI and manometry – measures included: whole gut transit time (WGTT), segmental CV, time to defecation, MRI-derived Motility Index, chyme movement, and left colonic high-resolution colonic manometry (HRCM). Subsequently, patients proceeded to a randomised cross-over study assessing constipation and pain symptoms, with the intervention being bisacodyl versus hyoscine.

Results revealed that FC and IBS-C both demonstrated longer WGTT and delayed evacuation following macrogol. Further, median (and range) MRI-assessed CV was significantly greater in FC (802 (633–951)) and IBS-C (776 (595–1033)) versus healthy volunteers (645 (467–780)), p<0.001. Significantly larger colons (>90th centile for healthy volunteers) not only predicted significantly delayed evacuation after a macrogol challenge (p<0.02) and impaired manometric meal response, but also reduced pain with bisacodyl (p<0.05).

These findings suggest that MRI assessment of CV could represent a useful tool in the individualised treatment of constipation for patients.