Hypothesis / aims of study
Combined urinary and anal incontinence has a serious impact on quality of life, and is being increasingly diagnosed and managed in the non-elderly care setting. Childbirth, chronic straining, connective tissue damage to pelvic floor supports, and denervation injury have all been suggested as aetiological factors in the causation of double incontinence.
While some authors have found an increased association of urge urinary incontinence with faecal urgency [1], others have found an increased incidence of stress urinary incontinence with anal incontinence. All the above estimates are based on questionnaire based studies.
We identified three reports of combined surgical management, describing intravaginal slingplasty (cure of both conditions), overlapping sphincteroplasty with colposuspension [2], and more recently, sacral nerve stimulation (for combined urge symptoms). However, not all patients can be successfully treated with surgical modalities alone. Indeed, surgery may not be appropriate for all patients with double incontinence, and they may need multidisciplinary input into their care over a period of time.
Our aim was to study the characteristics of 27 consecutive referrals to the Combined Pelvic Floor Clinic with urinary and faecal incontinence.

Study design, materials and methods
Patients were referred to the Combined Pelvic Floor Clinic by general practitioners but also from gynaecology and colorectal clinics. All patients were seen by a team, consisting of a urogynaecologist, colorectal surgeon, and colorectal nurse specialist thereby ensuring continuity of care. All patients had urodynamics, endoanal ultrasound and manometry studies. Pudendal nerve terminal motor latencies (PNTML) were done pre-operatively, and in those with no demonstrable sphincter defects. When clinically indicated additional tests including defaecation proctography, colonoscopy, and colonic transit studies were performed.

Results
The median age was 60 yrs (range 27-87) and the median parity was 2 (range 1-6). 19 patients (70%) had undergone previous pelvic surgery including abdominal hysterectomy (5), vaginal hysterectomy (5), pelvic floor repair (5), Manchester repair (2), colposuspension (4) and postanal repair (1).
Flatus incontinence was reported by all women. In addition incontinence to liquid or solid stools was reported by 63% and faecal urgency by 40%. Symptoms of stress urinary incontinence were reported by 23%, overactive bladder symptoms by 22% and mixed urinary incontinence by 50%.
The results of patients with demonstrable sonographic anal sphincter defects and those with no sphincter defects:are shown in Table 1

Table 1 Investigation results in patients with combined incontinence

<table>
<thead>
<tr>
<th>Investigations</th>
<th>Anal sphincter defect (n=10)</th>
<th>No sphincter defect (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low anal pressures</td>
<td>50%</td>
<td>66%</td>
</tr>
<tr>
<td>Delayed PNTML</td>
<td>30%</td>
<td>17%</td>
</tr>
<tr>
<td>Retaining rectocele</td>
<td>10%</td>
<td>27%</td>
</tr>
<tr>
<td>Urodynamic Stress Incontinence</td>
<td>70%</td>
<td>28%</td>
</tr>
<tr>
<td>Detrusor Overactivity Incontinence</td>
<td>10%</td>
<td>28%</td>
</tr>
</tbody>
</table>

All patients received conservative measures (including pelvic floor exercises and biofeedback) as first line treatment. Anal sphincter repair was performed in 11/27 (41%).
8/27(30%) received anal electrical stimulation therapy. 5 women with urodynamic stress incontinence had a TVT and one had a colposuspension. Combined urogynaecologic and colorectal operations were performed in 6 cases. Of these, 5 remain satisfied with the outcome, and one patient was troubled by exacerbation of pre-existing overactive bladder symptoms.

**Interpretation of results**
In this small group of patients with double incontinence, 70% had previous pelvic surgery. Although the majority of patients who presented with combined incontinence did not have an anal sphincter defect, they did have lower anal pressures. We also found that more women with sphincter defects had a prolonged PNTML indicating combined neurologic and mechanical trauma. Urodynamic stress incontinence was found to be present in a higher proportion of women with anal sphincter defects suggesting a common aetiological factor.

**Concluding message**
This study adds to the relatively small body of published data in combined urinary and faecal incontinence. The multidisciplinary approach appears to have many advantages in joint evaluation and management of these complex problems. With conservative therapy as first choice patient only selected patients should be offered surgery. In addition to cost savings, combined surgery has the advantages of both procedures being performed under a single anaesthetic and a single period of recuperation.

**References**