Introduction

• Urethrovaginal fistula (UVF) is a rare finding in clinical practice, particularly with recent improvements in obstetric care.

• There is a paucity of literature on the management and outcomes of this condition.

• As a specialist referral centre for Genitourinary Fistulae we sought to assess our cohort of patients with urethrovaginal fistula to evaluate the management and outcomes for patients with this condition.

Methods

• Prospective database of patients with Genitourinary fistulae at a single institution.

• Interrogated to identify patients with UVF over an 11 year period (March 2004 – May 2015).

• Data collected: Demographics, Aetiology of UVF, operative intervention, outcomes and post-operative continence.

• 24 patients identified:
  • Median age 53.3y (range 26-78y)
  • All patients had pre-operative VUDs (except 2 with concurrent VVF) and peri-operative cystourethroscopy.
  • Patients with post-operative incontinence underwent repeat VUDs.

Results (1)

• The aetiology of UVF in our cohort is outlined below in Table 1 – the majority were iatrogenic in nature.

<table>
<thead>
<tr>
<th>Aetiology of UVF</th>
<th>Number of patients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-urethral tape (MUT) for Stress UI (SU)</td>
<td>12 (50)</td>
</tr>
<tr>
<td>Excision of urethral diverticulum</td>
<td>4 (16.7) *</td>
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<tr>
<td>Untreated urethral diverticulum</td>
<td>2 (8.3)</td>
</tr>
<tr>
<td>Excision biopsy of vaginal tumour</td>
<td>2 (8.3)</td>
</tr>
<tr>
<td>Cystoscopy</td>
<td>1 (4.1)</td>
</tr>
<tr>
<td>Excision of ectopic uterus</td>
<td>1 (4.1)</td>
</tr>
<tr>
<td>Bladder neck reconstruction</td>
<td>1 (4.1)</td>
</tr>
<tr>
<td>Obstructed labour</td>
<td>1 (4.1) **</td>
</tr>
</tbody>
</table>

* = I concomitant vesicovaginal fistula (VVF)
** = I concomitant VVF

Results (2)

• 1 patient had a complex urethro-vesico-vaginal fistula which had occurred after obstructed labour requiring bladder neck closure with clam ileocystoplasty and mitrofanoff channel formation.

• She is continent with a functional, catheterisable channel at 13y follow up.

• 23 (95.8%) of patients underwent vaginal repair of UVF with modified martius fat pad interposition.

• All (100%) had successful anatomical closure.

• The pre-operative continence outcomes of these 23 patients are shown in figure 1 below:

• The post-operative continence outcomes are shown in figure 2 below (all interventions successful except TVT-O as marked):

Conclusions

• In our cohort aetiology of UVF is commonly iatrogenic following vaginal surgery.

• Vaginal repair of UVF is possible in 95.8% of cases with 100% anatomical closure success rates.

• In complex cases bladder neck closure and continent urinary diversion is a viable alternative.

• Post-operative urinary incontinence occurs in 34.8% and requires surgical management with success rates of 87.5%.