Introduction

• 30% of Ulcerative Colitis (UC) patients require colectomy.

• Restorative procto-colectomy (RPC) with ileal pouch-anal anastomosis (IPAA) is the preferred procedure.

• However published reports suggest up to 25% of patients subsequently manifest Crohn’s Disease (CD).

• 50% of these subsequently require pouch excision.

• This may inhibit clinicians from offering IPAA to children.

Aims

• To identify any cases of conversion of diagnosis from UC to CD among our cohort of children who have undergone IPAA.

Methods

• All children undergoing IPAA are recorded in a dedicated database.

• All undergo long-term regular follow up.

• Any children who have their pouch excised had the histological report of the excised pouch reviewed.

• All histology reports from long-term pouch surveillance and all clinical notes from long-term follow up were reviewed.

• We also examined details of the diagnostic work up prior to IPAA.

Results

• Between 1999 and 2020
• 84 children with UC: (85 pouches formed)

• Median age at IPAA: 13 years (4-17 years)

• 3 unable to anastomose (2 permanent stoma)

• 12 pouches excised for: poor function 4, pelvic infection 4, faecal incontinence 2, bleeding 1, other 1
  – 3 subsequent revisional pouch surgery
  - 73 patients currently have pouch in situ

• No CD in excised pouches

• No CD on long term follow up pouch surveillance history

• Median follow up 10 years (0.5– 20 years)

This differs from the published literature

<table>
<thead>
<tr>
<th>Paper</th>
<th>Year</th>
<th>Patients</th>
<th>Number</th>
<th>Crohn’s Conversion</th>
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<tbody>
<tr>
<td>Our series</td>
<td>Unpublished</td>
<td>Paediatric (long term follow up)</td>
<td>85</td>
<td>0%</td>
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<tr>
<td>Shannon et al</td>
<td>2016</td>
<td>Paediatric + young adult (long term follow up)</td>
<td>74</td>
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<td>Barnes et al</td>
<td>2019</td>
<td>Adult (meta analysis)</td>
<td>4843</td>
<td>10.5%</td>
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<td>Melton et al</td>
<td>2009</td>
<td>Adult (single centre)</td>
<td>2814</td>
<td>7%</td>
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</tbody>
</table>

Pre-operative work up

• Number of colonoscopies pre-colectomy: - Mean 3 (1-10)

• Pre-colectomy colonoscopies if initial biopsy indeterminate: - mean 3.5 colonoscopies

• 2 patients toxic megacolon (colectomy before 2nd scope)

• All patients histological diagnosis of UC before pouch surgery

Conclusions

• To date we have not identified any case of conversion of diagnosis from UC to CD among children who have undergone IPAA.

• This is despite long-term regular follow up of 84 children.

• Neither histological examination nor clinical behaviour has suggested any case of CD.

• This may reflect our pre-operative workup

• There is no reason to deny children an IPAA because of concern about diagnostic error

References


