IBD PRESENTING AS AN EMERGENCY!

DR SUCHITRA SIVADAS

DR VS SANKARANARAYANAN, DR SRINIVAS S

DR JANANI SANKAR, DR MALATHI S

DR LAKSHMI SUNDARARAJAN

Kanchi Kamakoti CHILDS Trust Hospital
CASE HISTORY

- S - 16 yr old thin built Marwari girl presented with
- Loose stools with **blood and mucus** - 20 days.
- 10 to 15 episodes/day. Frank bleeding - clots
- Associated tenesmus + Urgency +
- H/o arthralgia present
- Loss of appetite and weight +
- No fever, vomiting
Clinical examination seemed to suggest chronicity

Further history: Amenorrhea - 7 mos

Recently admitted in a local hospital in Rajasthan-diagnosed as proctitis. Given multiple blood transfusions.

No significant past or family history
EXAMINATION

- Sick looking, Emaciated
- Wt: 32.2 kg (< 5th centile) Ht: normal
- Marked pallor +++
- Bilateral pitting pedal edema ++
- HR 117/min
- BP-105/69 (MAP-79 mmHg)
- Abdominal tenderness over the right iliac fossa.
- PR - Blood stained finger
INVESTIGATIONS

- Hb- 6g%  TC-16000  P78 L10 B9  Plt 3.4 L
- ESR -8mm/hr
- Urea/ Cr - Normal
- Sodium-126, Potassium-2.8, Chloride-87, Bicarb-30
- S.Albumin-1.6g
- SGOT/SGPT-49/17
- Stool microscopy-Plenty of RBC+++/pus cells +++
- No Entamoeba trophozoites ,ova,cysts
- Stool C/S: no growth
PROVISIONAL DIAGNOSIS

- IBD more likely than a simple infective colitis
- Edema and malnutrition point to a chronic illness which was probably not recognized
- After stabilising and correction of metabolic derangements
- UGI Endoscopy & Ileo-Colonoscopy
- Working diagnosis: Severe Ulcerative Colitis
## UC SEVERITY INDEX

<table>
<thead>
<tr>
<th>SIGN/ SYMPTOM</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO OF STOOLS/ DAY</td>
<td>&lt; 4</td>
<td>4-6</td>
<td>&gt; 6</td>
<td>15</td>
</tr>
<tr>
<td>TEMPERATURE</td>
<td>AFEBRILE</td>
<td>INTERMEDIATE</td>
<td>FEBRILE &gt; 37.8</td>
<td>AFEBRILE</td>
</tr>
<tr>
<td>HEART RATE</td>
<td>NORMAL</td>
<td>INTERMEDIATE</td>
<td>&gt; 90</td>
<td>117/ MIN</td>
</tr>
<tr>
<td>HEMOGLOBIN</td>
<td>&gt; 11</td>
<td>10.5 - 11</td>
<td>&lt; 10.5</td>
<td>6</td>
</tr>
<tr>
<td>ESR</td>
<td>&lt; 20</td>
<td>20 - 30</td>
<td>&gt; 30</td>
<td>8</td>
</tr>
<tr>
<td>ALBUMIN</td>
<td>NORMAL</td>
<td>3 - 3.5</td>
<td>&lt; 3</td>
<td>2.6</td>
</tr>
<tr>
<td>WEIGHT LOSS</td>
<td>NONE</td>
<td>1-10%</td>
<td>&gt; 10%</td>
<td>?</td>
</tr>
</tbody>
</table>
HPE: confirmed severe ulcerative colitis

Started on **iv methyl prednisolone, steroid enemas, antibiotics** and **ASA** preparations

Did not show any improvement even after 5 days

She continued to bleed and lose weight

Suggested TPN - affordability issues
Parents counseled regarding the **aggressive** nature of illness and the possible **need for surgery**, however unwilling to accept it as an option.

- Family wanted ‘**quick-fix**’ remedies
- Wanted to pursue traditional medicine
- Discharged against medical advice on oral steroids and ASA preparations
10 DAYS LATER

- Readmitted - different unit persisting bleeding PR, abdominal pain and fatigue, critically ill state
- Severe wt loss (wt 25 kg, loss of 8 kg in 10 days)
- Pallor++, Pedal edema+
- Tense tender abdomen
- Plain X-ray abdomen: no toxic megacolon

Father and daughter fervently wishing for a medical cure
Severe ulcerative colitis - ? refractory to steroids
- Restarted on *pulsed MPS*
- iv cyclosporine was considered
- *Surgeon was involved*
- Continued to have torrential bleeding PR
- Needing PRBCs on almost every day
- Family *still against surgery* - wanted to visit a saint
BUT FINALLY WE TRIUMPHED

- **11.07.11** - Subtotal colectomy with end ileostomy
- Stormy post op period
- Oral steroids were gradually tapered and stopped
- Finally discharged on steroid enemas for disease in residual rectal stump
Use of alternative medications in steroid refractory colitis so as to avert surgery

- **Cyclosporine** and **Infliximab** - are being tried when there is no response to adequate dose of steroids beyond 5-7 days

- Cyclosporine - very little pediatric experience

- Infliximab - very expensive. Works better in indeterminate colitis rather than in classical UC
2 MONTH REVIEW

- 5kg wt gain
- Hb -13.6g%
- No bleeding PR on steroid enemas
8 MONTH FOLLOW UP

- **03.02.12** – Proctoscopy confirmed reasonably healed mucosa with steroid enemas
- **10.02.12** – Underwent ileoanal pull through with a covering ileostomy
- **April 2012** – Ileostomy finally closed
10 MONTH FOLLOW-UP

- She is doing very well!

- Thanks to the coordinated and concerted efforts of the medical and surgical teams.
## INDICATIONS FOR SURGERY

<table>
<thead>
<tr>
<th>Emergency surgery</th>
<th>Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Toxic megacolon refractory to medical Rx</td>
<td>□ Failure of medical therapy</td>
</tr>
<tr>
<td>□ <strong>Fulminant colitis</strong> refractory to medical Rx</td>
<td>□ Chronic steroid dependency</td>
</tr>
<tr>
<td>□ Uncontrolled colonic bleeding</td>
<td>□ FTT in children</td>
</tr>
<tr>
<td>□ Perforation (free or walled off)</td>
<td>□ Dysplasia found on screening</td>
</tr>
</tbody>
</table>
TAKE HOME MESSAGE

- UC presenting as a surgical emergency is rather rare
- The patient is usually very sick needing aggressive medical management with correction of anemia, hypoalbuminemia, metabolic derangements & TPN
- A surgeon needs to be involved early in severe UC as acceptance of a colectomy/ **ileostomy** by the patient and family in a previously well child needs repeated counseling and convincing
- Surgery offers a complete ‘**cure**’ in ulcerative colitis
Sometimes it is better to send the patient home without a colon than bury her with it!

- True Love and Witts
## FACTORS PREDICTING OUTCOME IN SEVERE UC

<table>
<thead>
<tr>
<th>DAY OF TREATMENT</th>
<th>PREDICTIVE FACTORS</th>
<th>NEED FOR COLECTOMY</th>
<th>FAILURE OF THERAPY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Stool frequency &gt; 9</td>
<td></td>
<td>62%</td>
</tr>
<tr>
<td></td>
<td>Albumin &lt; 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heart rate &gt; 90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any day</td>
<td>Colonic thickening &gt; 5.5 mucosal islands</td>
<td></td>
<td>75%</td>
</tr>
<tr>
<td>Day 3</td>
<td>Stool frequency &gt; 8</td>
<td>82%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRP &gt; 45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# TRUELOVE AND WITTS

<table>
<thead>
<tr>
<th></th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NO OF STOOLS/ DAY</strong></td>
<td>&lt;4</td>
<td>4-6</td>
<td>&gt;6</td>
</tr>
<tr>
<td><strong>TEMPERATURE</strong></td>
<td>AFEBRILE</td>
<td>INTERMEDIATE</td>
<td>FEBRILE &gt;37.8</td>
</tr>
<tr>
<td><strong>HEART RATE</strong></td>
<td>NORMAL</td>
<td>INTERMEDIATE</td>
<td>&gt;90</td>
</tr>
<tr>
<td><strong>HEMOGLOBIN</strong></td>
<td>&gt;11</td>
<td>10.5-11</td>
<td>&lt;10.5</td>
</tr>
<tr>
<td><strong>ESR</strong></td>
<td>&lt;20</td>
<td>20-30</td>
<td>&gt;30</td>
</tr>
</tbody>
</table>