History of IBD in India
History before History

1769 : Morgagni : gave the first description of Crohn’s Disease

1865 : First description of Ulcerative colitis recorded in Annals of Union Army Medical Corps

Ayurveda : Grahini Rog
Dalziel 1913, The British Medical Journal Vol. 2, No. 2756
"In vol. xx of the Journal of Comparative Pathology and Therapeutics, McFayden draws attention to Johne's disease, a chronic bacterial enteritis of cattle which the histological characters and naked eye appearances are as similar as may be to those found in man."

Chronic Interstitial Enteritis

By T. E. Dalziel, M.R. C.M., F.R.I.P.S.G., Surgeon, Western Infirmary, Glasgow

I have pleasure in drawing your attention to this condition, which, I think, has not yet been fully described.

Twelve years ago I saw a professional colleague, suffering from obstruction of the bowels of a fortnight's duration, previous to which he had had for several weeks numerous attacks of colic, slight attacks of diarrhoea with no tenderness over the abdomen, and very slight rise in temperature, with no appreciable alteration in the pulse-rate. When seen by me the abdomen was not distended nor were the muscles rigid, but to the hand gave a sense of putty-like resistance. As vomiting was persistent, I concluded that there might be an obstruction high up, and so opened the abdomen, to find the whole of the intestines, large and small alike, contracted, rigidly...
ARTICLE  
October 15, 1932

REGIONAL ILEITIS

A PATHOLOGIC AND CLINICAL ENTITY

Burrill B. Crohn, M.D.; Leon Ginzburg, M.D.; Gordon D. Oppenheimer, M.D.

JAMA. 1932;99(16):1323-1329.
The Reason why it is called as Crohn’s Disease - 1932

As all the authors of a paper are listed in alphabetical order, Dr Burrell B Crohn's name was the first on the list.

Although he saw only 2 of the 14 cases described.

Physicians in England, for want of a less ominous name than 'terminal ilitis', nicknamed the condition 'Crohn's Disease'.

120 cases of Non Specific Ulcerative colitis


Jalan et al, Pimparkar et al, Jha et al – case series
Ulcerative colitis

Rare disease

Not rare but maybe uncommon disease

Maybe much more common than imagined
This is not very different from the reported admission rate of 10 cases per 10,000 hospital admissions in the United Kingdom.
Diseases change fashion, and the most talked about diseases those days were amebiasis, tropical sprue, non-cirrhotic portal hypertension, peptic ulcer and the newly emerging (in India) ulcerative colitis.

Gastroenterology in India – a retrospect
V Balakrishnan , IJG 2007

First batch DM Gastro at PGI , Chandigarh
First Seminar on Ulcerative Colitis

- Asian Congress of Gastroenterology - 1964
- Conducted in Chandigarh
- Dr PN Chuttani was the Chairman
- National Seminar on Ulcerative Colitis
- 136 Cases were presented
Rohtak Study - 1984

- 21,971 subjects
- Prevalence rate of Ulcerative colitis in community: 42.8/100,000

Khosla SN, J Assoc Physicians India. 1986 Jun;34(6):405-7

Ludhiana study 1999-2000

- 51,910 population screened
- 23 cases of UC
- Prevalence rate: 44.3/100,000
- Same population visited a year later
- Incidence rate: 6.02/100,000

(Sood et al, Gut 2003)
• No population based studies from South
• UC > CD
• UC higher in Hindus vs Muslims - smoking
• 50% had extra intestinal symptoms

ISG-IBD Task force 2010
What do we infer from these studies?

<table>
<thead>
<tr>
<th>Region</th>
<th>Incidence</th>
<th>Prevalence/100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA and Europe</td>
<td>3-15</td>
<td>50-80</td>
</tr>
<tr>
<td>India</td>
<td>6</td>
<td>44</td>
</tr>
<tr>
<td>Japan</td>
<td>1-2</td>
<td>10-18</td>
</tr>
</tbody>
</table>

*India is definitely a moderate incidence area for UC*
Indian Migrant population

- The incidence rate of UC among South Asians is about twice as high as that in Europeans.
- The incidence rate of UC among South Indians in England is one of the highest in the world.

Probert CS, Jayanthi V, Gut. 1993 Nov;34(11):1547-51
Evolution of IBD in the West

- Initially UC>>CD
- Increase in CD in 1990s
- By a gap of almost 40 years
  
  CD=UC

  *Loftus, Gastroenterology, 2004*

- India - nonexistent till 1986 – case series from tertiary care centres of specialised GE clinics
Increase in CD in India: Hygiene-hypothesis

- Chronic infections acquired in childhood induce immune tolerance to various extrinsic antigens
- Children and adults from developing countries are often infested with helminths
- Improving sanitation-Less helminthic infestation-Increase in incidence of immune mediated disorders

Incomplete explanation
Increase in CD in India: Apparent?

• It is more, but detected to be less
  – Confusion with intestinal tuberculosis
  – Confusion with UC
• More apparent because of
  – Increase in awareness of its occurrence
  – Increase in willingness of accepting a diagnosis
  – Evidence based practice

Makharia G, JGH, 2006
Increase in CD in India: Real?

IBD: A disease of civilization

- The incidence of IBD in North America and Europe increased dramatically during the 20th century
- Common in highly industrialized countries
- Furthermore, IBD emerges as countries develop

Ahuja V, IJG 2013
# Increase in reporting of CD in India

<table>
<thead>
<tr>
<th>Author</th>
<th>Center</th>
<th>No.</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pai, 2000</td>
<td>Manipal</td>
<td>25 pts</td>
<td>IJG, 2000</td>
</tr>
<tr>
<td>Zacharias P</td>
<td>Kochi</td>
<td>38 pts</td>
<td>IJG (abstr), 2001</td>
</tr>
<tr>
<td>Philip M</td>
<td>Kochi</td>
<td>229 pts</td>
<td>IJG (abstr), 2001</td>
</tr>
<tr>
<td>Kumar R</td>
<td>Delhi</td>
<td>10 pts</td>
<td>IJG (abstr), 2001</td>
</tr>
<tr>
<td>Tandon, R</td>
<td>Delhi</td>
<td>25 pts</td>
<td>IJG (abstr), 2001</td>
</tr>
<tr>
<td>Philip M</td>
<td>Kochi</td>
<td>410 pts</td>
<td>IJG (abstr), 2004</td>
</tr>
<tr>
<td>Amte</td>
<td>CMC Vellore</td>
<td>70 pts</td>
<td>IJG (abstr), 2005</td>
</tr>
</tbody>
</table>
186 patients with CD

IPGMER, Kolkata (centre 1)
SGPIMS, Lucknow (centre 2)
AllMS, New Delhi (centre 3)

Das K, Dig Dis Sci 2008
Intestinal Tuberculosis vs Crohn’s Disease

• Both diseases can masquerade as each other
• Diagnostic dilemma despite best investigational back up
• No gold standard test available to differentiate both
• 30% of CD patients end up having a ATT trial before being diagnosed as Crohn’s
<table>
<thead>
<tr>
<th>Condition</th>
<th>CD</th>
<th>TB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>25%</td>
<td>68%</td>
</tr>
<tr>
<td>Altered Bowel</td>
<td>67%</td>
<td>34%</td>
</tr>
<tr>
<td>Pulmonary</td>
<td>8.2%</td>
<td>34%</td>
</tr>
<tr>
<td>Abd distension</td>
<td>26%</td>
<td>46%</td>
</tr>
<tr>
<td>Rec Int Obst</td>
<td>59%</td>
<td>34%</td>
</tr>
<tr>
<td>Peritoneal nodules</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td>Ascites</td>
<td>27%</td>
<td>68%</td>
</tr>
<tr>
<td>Strictures</td>
<td>64%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Int fistula</td>
<td>20%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Deep linear ulcers</td>
<td>59%</td>
<td>19%</td>
</tr>
<tr>
<td>Cobblestoning</td>
<td>64%</td>
<td>17%</td>
</tr>
</tbody>
</table>
## CT Findings

<table>
<thead>
<tr>
<th>Crohns</th>
<th>TB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mural thickening with stratification</td>
<td>Mural thickening without stratification</td>
</tr>
<tr>
<td>Strictures - eccentric</td>
<td>Concentric</td>
</tr>
<tr>
<td>Fibro fatty proliferation of mesentery</td>
<td>Rare</td>
</tr>
<tr>
<td>Hyper vascular mesentery</td>
<td>Mesenteric infiltration</td>
</tr>
<tr>
<td>Mild lymphadenopathy + Abscesses</td>
<td>Hypodense LN</td>
</tr>
</tbody>
</table>


Epidemiological differences from developed countries

Males predominance in Crohns

Lower incidence of extra intestinal manifestations

Lower risk of colorectal cancer

NOD2/CARD 15 gene not associated with Crohns in India
Conclusion

Registries for IBD

Limitations of access to health care facilities

Limited availability of diagnostic tests

Infections diseases confound Dx of IBD

Diversity of medical practices