Study of inflammatory bowel disease

Dr. Revindra M Yadhav, Dr. Ram Kulkarni and Dr. Prakesh Patnkar

Abstract
Aim: observations at the laboratory bench will continue to be translated into enhanced diagnostic and therapeutic strategies in the clinic

Material and Method: Local causes of haemorrhoids and fissure will be excluded. History of all patients will be noted. All routine examinations will be done. Specific investigations will be done like stool–examination, colonoscopy and barium study wherever necessary and economically possible.

Results: Out of 42, 27 were found to be cases of inflammatory bowel disease. Ulcerative colitis – 10 cases, Infective colitis – 5 cases, Non-specific colitis – 12 cases.

Conclusion: Colonoscopy is a useful tool in the diagnosis of IBD. Biopsy is considered to be gold standard of diagnosis of colitis. Non-specific colitis is 3rd mos t common cause in surgery OPD after haemorrhoids and malignancy and ulcerative colitis is 4th in the list. There was a single case on colonoscopy which was suggestive of Crohn’s colitis but the biopsy came out to be non-specific colitis. So crohn’s colitis is a very entity in our region.

Keywords: colonoscopy, haemorrhoids, ulcerative colitis

Introduction
Professor Anne Ferguson challenged the medical, political and research communities with a provocative editorial in which Crohn's disease and ulcerative colitis were referred to as 'important and disabling diseases, still under-researched.' Since then there have been remarkable improvements in our understanding of the pathophysiology of these disorders. The molecular mediators and major pathways of tissue injury have been identified. The new information promises to be translated into improvements in patient management [1]. This is reflected in a progressive shift from therapeutic empiricism to evidence-based management. Changes in research strategy have perhaps been even more important than technological progress in providing an integrated and coherent overview of disease mechanisms. Complex disorders require research input from a diversity of perspectives, including traditional disciplines, such as biochemistry, microbiology and immunology [2]. Understanding the role of endogenous outcome modifiers such as psychological stress, the brain-gut axis, and even the placebo response of the individual, requires the same transdisciplinary perspective. Perhaps the most intriguing convergence of research avenues is the interaction among the three major ingredients of the pathophysiology of inflammatory bowel disease (genetic predisposition, environmental bacteria and immune dysregulation) [3]. Indeed, the interface at the center of this triad appears to have become the basis of a unifying concept for the development of most autoimmune disorders. It is perhaps not surprising that one of the genes associated with increased susceptibility to Crohn's disease (NOD2) is linked to the mechanism of immune perception of the bacterial microenvironment. One might predict that additional genes will be identified which regulate how the host immune system handles the microbial flora within the gut [4].

In summary, inflammatory bowel disease is more exciting than ever; it remains a rewarding field for basic researchers and clinicians. Notwithstanding the extraordinary advances brought about by the genotech-biotech era, clinical clues at the bedside continue to pose the correct questions to be tackled in the research laboratory [5]. Likewise, observations at the laboratory bench will continue to be translated into enhanced diagnostic and therapeutic strategies in the clinic. This bench-bedside interface shared by the clinician and the basic investigator needs to be nurtured, as it can pay handsome dividends for patient welfare.
Material and Method
In this study, patients presenting with clinical picture suggestive of inflammatory bowel disease / infectious colitis were evaluated according following protocol. The cases will be selected from OPD as well as IPD wards presenting with symptoms of abdominal pain, diarrhea, rectal bleeding, tenesmus, weight loss, fever and vomiting. Local causes of haemorrhoids and fissure will be excluded. History of all patients will be noted. All routine examinations will be done. Specific investigations will be done like stool – examination, colonoscopy and barium study wherever necessary and economically possible.

Result and Discussion
The study covered a total of 42 patients who presented with symptoms of IBD, excluding the local diseases, in Krishna Hospital. Out of 42, 27 were found to be cases of inflammatory bowel disease. Ulcerative colitis – 10 cases, Infective colitis – 5 cases, Non-specific colitis – 12 cases.

Table 1: Showing etiological and sex wise distribution of cases

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulcerative colitis</td>
<td>7</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Crohn’s colitis</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Amoebic colitis</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Non-specific colitis</td>
<td>7</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Malignancy</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>others</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>

i.e. around 65% of patients were diagnosed as IBD. 7 cases were diagnosed as malignancies (adenocarcinoma colon). 2 were diagnosed as ileo-caecal tuberculosis. 1 was diagnosed as adenomatous polyps and 1 was spindle cell tumour. 4 were normal. In 10 cases of ulcerative colitis, 7 were male and 3 were females. Also 7 out of 10 i.e. 70% were in the age group of 21 to 40 years of age, 2 were in the age group of 51-60 i.e. 20% and 1 patient i.e. 10% was in the age group of 61-70.

So majority of patients (70%) were predominantly of younger age group as compared to other diseases in IBD,[5-7] 7 out of 10 i.e. again 70% of patients had symptoms predominantly for a period of more than a year. 2 had symptoms for period ranging from 0-6 months and 1 had symptoms for 6 months to 1 year.

All patients of ulcerative colitis presented with PR bleeding and diarrhoea, 4 had generalized abdominal pain, 1 had fever, 1 had tenesmus and no nausea vomiting. In literature there is association of tobacco smoking preventing the ulcerative colitis but no such association was found in this study. [8-9] 5 out of ten were chronic smokers, smoking more than 10 cigarettes per day for more than 10 years and had persistent symptoms of ulcerative colitis. On colonoscopy, 11 out of 42 i.e. around 24% were found to have ulcerative colitis but out of those 11 only 8 i.e. around 80% were found positive for ulcerative colitis. Whereas total 10 patients out of 42 i.e. 23% were found to be positive for ulcerative colitis on biopsy. Remaining 3 out of 11 patients who were found to be of ulcerative colitis on colonoscopy were negative for ulcerative colitis on biopsy. And 2 who were labeled as non-specific colitis on colonoscopy were found to be positive for ulcerative colitis on biopsy. So out of 42, 10 were taken to be of ulcerative colitis as biopsy is considered as gold standard for diagnosis of colitis. In 12 cases of non-specific colitis, 7 were male and 5 were females. 8 out of 12 i.e. 66% were in the age group above 50 years of age, only 4 patients were in a age group of 21-40 years of age. So majority of patients (66%) were predominantly of elderly age group as compared to ulcerative colitis.[10]

8 out of 12 i.e. again 66% of patients had symptoms predominantly for a period of less than 6 months and 4 had symptoms for more than a year. Most patients of non-specific colitis presented with PR bleeding and diarrhoea, 8 patients had PR bleeding and diarrhoea, 5 had generalized abdominal pain, 1 had fever, 1 had tenesmus and 2 had nausea vomiting.

5 out of 12 were chronic smokers, smoking more than 10 cigarettes per day for more than 10 years and no significant relation could be found in cigarette smoking and non-specific colitis.

On colonoscopy, 9 out of 42 i.e. around 20% were found to have non-specific colitis but out of those 9, 7 i.e. around 77% were found positive for non-specific colitis. Whereas total 12 patients out of 42 i.e. 30% were found to be positive for non-specific colitis on biopsy. Remaining 2 out of 9 patients who were found to be of nonspecific colitis on colonoscopy were found to be non-specific colitis on biopsy. And 3 who were labeled as ulcerative colitis on colonoscopy were found to be non-specific colitis on biopsy. So out of 42, 12 were taken to be of non-specific colitis as biopsy is considered as gold standard for diagnosis of colitis. In 5 cases of amoebic colitis, 4 were male and 1 was female. No specific age distribution can be commented upon in cases of infective colitis.

All patients of amoebic colitis had symptoms for less than 7 days and were acute in presentation and with no past history of similar complaints as compared to non-specific colitis which was predominantly sub-acute and ulcerative colitis which was predominantly chronic in presentation.

All patients of amoebic colitis presented with diarrhoea, pain, tenesmus. 2 had fever and PR bleeding and 3 nausea vomiting.

Amoebic colitis has no association with cigarette smoking. Colonoscopy and biopsy findings match in case of amoebic colitis. All 5 were suggestive of amoebic colitis on colonoscopy and biopsy was also positive for all 5 patients. In this study 7 cases were found to be of adenocarcinoma colon, 2 were of ileo-caecal tuberculosis, 1 was spindle cell tumour, 1 was adenomatous polyps and 4 were normal.

Conclusion
Inflammatory bowel disease is the most missed diagnosis in surgery OPD as well as surgery IPD. In this study an attempt is made to easily diagnose a case of inflammatory bowel disease.

Colonoscopy is a useful tool in the diagnosis of IBD. Biopsy is considered to be gold standard of diagnosis of colitis. Non-specific colitis is 3rd most common cause in surgery OPD after haemorrhoids and malignancy and ulcerative colitis is 4th in the list. There was a single case on colonoscopy which was suggestive of Crohn’s colitis but the biopsy came out to be non-specific colitis. So crohn’s colitis is a very entity in our region.
References