DISCUSSION

A surgeon has to sometimes face the dilemma when he has to establish a diagnosis when other preliminary diagnostic modalities of lesser magnitude have been unproductive and indecisive in cases of patients with lower gastro-intestinal pathologies presenting as bleeding per rectum.

Sigmoidoscopy has historically been extremely valuable diagnostic tool in the study of colonic diseases. Since the barium enema provides an examination beyond the capability to sigmoidoscopy but the sigmoidoscopy could be used directly to examine the more difficult areas of radiologic evaluation, the two techniques were obviously found complementary (Miller, 1982). In the present study barium enema was also performed in same cases. Sigmoidoscopy has its advantages and disadvantages. Unfortunately, the procedure is not 100 percent accurate.

Accurate assessment of the extent, progression of diseases and the need to obtain a tissue diagnosis is important for proper planning of therapy and evaluation of effectiveness. Sigmoidoscopy has large part to play in this role.
Several studies have compared the sensitivity and specificity of the radiologic and sigmoidoscopic examinations of the lower gastro-intestinal tract and have emphasized the fallibility and complementary nature of the two investigations (Saunders et al., 1971 and Wolff et al., 1975).

In the present study 52 cases were evaluated with chief symptom of fresh bleeding per rectum or passage of blood mixed stools, in whom diagnosis was not established by the preliminary examination with proctoscopic. 37 (71.15%) cases showed abnormal sigmoidoscopic findings, while the rest 15 (28.84%) cases were found normal on sigmoidoscopy. The cause of symptoms in these 15 cases was beyond the reach of the sigmoidoscopy. In some of these cases barium enema was performed while other were subjected to exploratory laprotomy.

Out of the 37 cases in whom sigmoidoscopically some lower gastro-intestinal lesion was found, 14 (26.92%) cases were of colonic malignancy. Majority of these cases were males, 11 (78.5%) and in the age group of 51-60 years (8, 57.14%).

There were 14 (26.92%) cases of ulcerative colitis. 5 cases had moderately severe disease and
the rest 9 (64.28%) cases had moderate disease on sigmoidoscopy. Some of the moderately severe cases had involvement up to splenic flexure on barium enema examination.

Majority of cases of ulcerative colitis were males (8, 57.14%) and belonged to age group of 11-20 years (5, 35.71%) and 31-40 years (4, 28.57%). There were 6 cases of amoebic colitis and they belonged to age group 21-30 years (3, 50%) and 31-40 years (3, 50%). Out of the total cases of amoebic colitis 4 (66.67%) cases were males.

There were total 3 (6.76%) cases of polyps and all were males and belonged to age group of 0-10 years.

In the present study, the sigmoidoscopy was undoubtedly better as a first line of investigation in the detection of lower colonic diseases presenting with bleeding. The total diagnostic yield of sigmoidoscopy was significantly good (37/52, 71.15%). No patient sustained a major complication and none required urgent treatment. This confirms the safety of the procedure which is consistent with studies of Gelfand (1980) and Abrams (1982).
Hughes (1957) stated that 25% sigmoidoscopies fail to reach the full length of 25 cm, while Jackman (1958) quoted 14.8% of failure. In contrast to these studies full insertion up to 25 cm failed in 23.07% of our examinations. Included in this, 3 cases were less than 10 years of age. Sigmoidoscope was passed to full length of 25 cm in 29 (55.76%) cases of our study group. The average distance achieved in our study with rigid sigmoidoscope was 23.82 cm. In the study by Leicester et al (1982) the average distance to which rigid sigmoidoscope was inserted was 17.7 ± 4.0 cms.

Studies from various regions suggested that the incidence of ulcerative colitis was rising before 1960. Sedlac et al (1972) in Minnesota USA - 7.2%, Evans et al (1965) Oxford U.K. - 6.5%. It has been steady over the past 20 years. Gilat et al (1974) Tel Aviv- Israel 3.6%. Bonneive et al (1968) Copenhagen-Denmark - 7.3%. Binder et al - Denmark - 8.1%.

Two recent studies from United Kingdom (Sinclair et al, 1980 and Devlin et al, 1980) are exceptional and showed a very high incidence and rising trend of ulcerative colitis 11.3% and 15.1% respectively.
In all the above studies the incidence of ulcerative colitis was determined in the patients presenting with any of the gastro-intestinal symptoms. In our study we had done sigmoidoscopy only in those patients who had bleeding as one of their chief complaints. The incidence of ulcerative colitis in our study group is 14-52 (26.92%). In the study of Teague et al (1978) the ulcerative colitis was found in 16 out of 85 cases of bleeding per rectum(18.82%).

The diagnostic yield from rigid sigmoidoscope for carcinoma of sigmoid colon in symptomatic patients had been reported as 4.6% (Leicester et al, 1983).

Vellacott et al (1982) reported incidence to be 2.3%. These incidences were reported from group as a whole presenting with any symptoms. In our study there were 14 cases of malignancies out of a total of 52 cases presenting with bleeding per rectum(26.92%). In the Teague et al (1978) the incidence was 27/89 (30.33%). Our study is consistent with the findings of Teague et al (1978).

Screening for colonic carcinoma by stool occult blood testing has a sensitivity of 75% (Hardcastle et al, 1983). In this present study it was as high as 100%. Hence a combination of
sigmoidoscopy and stool occult blood testing will produce the best detection rate for colonic carcinoma.

It has been emphasised by several authors that 75% of all colorectal carcinoma are found within the reach of rigid sigmoidoscopy (Le fall, 1974; Rosate et al, 1981), while in the present study it has been seen that all 14 cases who presented with bleeding per rectum were within the reach of sigmoidoscope i.e. 100%.

Taylor et al (1987) contended that patients with colonic carcinoma above 15 cm whose conditions were diagnosed using flexible sigmoidoscopy, should prior to surgical resection undergo rigid sigmoidoscopy to rule out a more distant lesion missed by the flexible instrument. They base their contention on their clinical experience with two patients each of whom had distal colon carcinoma that were missed by flexible sigmoidoscopy and subsequently seen by rigid sigmoidoscopy. They suggested that rigid instrument may be better able to detect such lesions because of the straightened configuration that bowel is forced to assume.

The advantage of taking biopsy specimens for histological examinations is a strong argument in favour of the sigmoidoscopic technique (Williams, 1984). In our
study all the cases who were diagnosed to be malignancy
came out to be same on histological examination.

It has been demonstrated in our study that
the patient with rectal bleeding may be adequately
investigated by sigmoidoscopy. It has been seen
that onset of the lesions of the lower gastro-intes-
tinal tract especially sigmoid colon and rectum have
bleeding one of their earliest and the important
symptoms i.e. in cases of ulcerative colitis the
symptoms of rectal bleeding is seen in 55% of cases.
(Peete and Sabiston, 1972) besides the other symptoms
like diarrhoea, abdominal pain, weight loss, tenesmus
etc. The sigmoidoscopy would lead to early detection
of the lesion and thus helping in the institution of
early treatment to achieve better prognosis.

We have discussed the value of sigmoidoscopy
in making the positive diagnosis in with bleeding per
rectum who had negative response from preliminary
investigation and even from radiological procedures.
However, we feel that it serves an equally important
function in helping to exclude serious colonic lesions.
This enables us to reassure patient with frank rectal
bleeding to redirect diagnostic effort away from the
colon.