A Dissertation on Non Traumatic Abdominal Emergencies

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

ABSTRACT

The incidence of appendicitis is most commonly seen in the age group of non traumatic abdominal emergencies between 15 and 25 accounting for 30% of all the studied cases. In this studied cases males were predominantly affected. The main cause of viscus perforations are Duodenal perforation percentage. This study results shows the male preponderance and also a decrease in age of peptic ulcer majorly due to typhoid. The most commonest hernias to become obstructed is inguinal hernia. Small bowel obstruction seems to be disease of the young as shown by our series. Both the sexes were mostly affected from our findings. Maximum in the 0-10 age group, we had only 3.9% of such cases in our study. The female incidence (56.3%) predominated over the male incidence (43.7%).

Keywords: Perforations; appendicitis; typhoid; abdominal emergencies.

1. INTRODUCTION

Acute abdominal pain becomes main cause for the admissions in surgical wards. It actually causes a lot of surgical pain for the surgeons and also management problems. Patiently analyzing the patient history and physical examination remains the corner stone of diagnosis. Recent days the improvised diagnostic procedures, anesthesia, antibiotics, patient care had reduced
the severity of acute abdomen [1-3]. An accurate diagnosis is essential for the correct treatment, which in many cases will prevent the death of the patient. The natural history of acute abdomen depends on the pathological process involved, which in some instances may resolve spontaneously with or without treatment and at other times may progress to generalized peritonitis and death. Hasty decisions are rarely necessary and if carried out may be incorrect or misleading [4-7].

The history and physical examination done by an unhurried surgeon remains the cornerstones of the diagnosis, which is confirmed by laboratory data and, or when necessary, by radiographic studies. If this information is inadequate to establish a diagnosis and urgent or immediate operation is unnecessary, the periodic re-examination helps document the progression of the disease and often avoids unnecessary surgical intervention. Understanding the anatomy and physiology of the peritoneal cavity as well as the pathological process that occur is essential for an accurate diagnosis and treatment [8,9].

This study aims to analyze the various causes and incidence of Non-traumatic acute abdomen in our study area. To study the age incidence and to analyze the role of conservative management.

2. METHODOLOGY

2.1 Inclusion Criteria

1. A total of 526 patients admitted in the emergency surgical ward as acute abdomen at Sree Balaji Medical College & Hospital.
2. Patients with history of trauma were excluded from the study.
3. Patients with non-gastrointestinal etiology were also included in this the study.

On admission, a detailed enquiry into the previous history and a systematic, through clinical examination was conducted and the possible necessary investigations were done for all the patients.

3. RESULTS

From the study it was understood that the most affected of affected case were from the age group of 10-30 years. Of the total 227 cases analysed, there were 11 cases of appendicular perforations, 4 cases where early mass formation, appendicectomy was easily possible. 5 cases were appendicular abscess. The most common obstructed type was right sided inguinal hernia. twenty one as compared to thirteen on the left and The repair procedure most commonly done was prolene Darning. Only one patient had obstructed incisional hernia and one male had obstructed incisional hernia. There were a total of 5 cases in the fifth decade of life and the eldest was a 75 year old male with sigmoid volvulus.in the case of ectopic pregnancy the method adopted was salphingo-oophorectomy. In the twisted ovarian cyst, anoopherectomy was done. All the specimens were sent for HPE.

Table 1. Nature of presentation

| Position     | Incidence |
|--------------|-----------|
| Retrocaecal  | 147 cases | 65%     |
| Pre-ileal    | 45 cases  | 20%     |
| Post-ileal   | 15 cases  | 6%      |
| Paracaeal    | -7 cases  | 3%      |
| Subcaecal    | 1 case    | 0.5%    |
| Pelvic       | 12 cases  | 5.5%    |

Table 2. Position of appendicitis

| Position     | Incidence |
|--------------|-----------|
| Retrocaecal  | 65%       |
| Pre-ileal    | 20%       |
| Post-ileal   | 6%        |
| Para-caecal  | 3%        |
| Subcaecal    | 0.5%      |
| Pelvic       | 5.5%      |

Table 3. Duodenal perforation

| Age in years | Total no | Percentage |
|--------------|----------|------------|
| 10-20        | 0        | 0          |
| 21-30        | 8        | 19.5       |
| 31-40        | 9        | 21.9       |
| 41-50        | 12       | 33.3       |
| >50          | 12       | 33.3       |

Table 4. Small bowel obstructions

| Type          | Total no | Percentage |
|---------------|----------|------------|
| Adhesions     | 15       | 42.8       |
| Strictures    | 5        | 14.2       |
| Internal      | 3        | 8.5        |
| herniation    |          |            |
| Band          | 10       | 28.5       |
| Worm bolus    | 1        | 2.8        |
| Intussuception| 1        | 2.8        |
Table 5. Large bowel obstructions

| Causes              | Total no | Percentage |
|---------------------|----------|------------|
| Sigmoid volvulus    | 1        | 20%        |
| Recto sigmoid       | 3        | 60%        |
| Carcinoma           |          |            |
| Colonic growth      | 1        | 20%        |

4. DISCUSSION

As in previous study females (56.3%) predominated males (43.7%) in the incidence of the disease. Looking at the affected position, retrocaecal is the most infected site, reported to be almost 65%. were retrocaecal as compared to the western series 75% to 80%. The other position which is affected secondly is the pre-ileal site (20%). When comparing to the usual 1%-2%. There was a reduced incidence of pelvic appendix 5.5% as compared to the western series 20-25%. Our study thus showed an increase in the frequency of the ileal position with a sharp drop in the pelvic type. All appendix specimen was negative for carcinoid. The most commonly affected age group was 41-50 years and these results are in concurrence with the previous studies done. This was same as the general studies which showed the maximum incidence in the 40 age group. Out of the 4 gastric perforation, 3 were on the prepyloric and one on the greater curvature. Four cases of gastric ulcer which had perforated, a simple perforation closure and biopsy was done. Of the 47 cases, 43% were obstructed inguinal hernias. Though femoral hernias are the commonest to get obstructed, we had only 2 cases in our series. There were 3 sliding hernias which got obstructed. Of the incisional hernias, the previous surgery had been an abdominal hysterectomy. A single anatomical repair was enough in all these cases. 2 cases of femoral hernia which was obstructed was approached through low inguinal (lockwood) incision. The contents were reduced and hernioraphy was done. 50% incidence of cases were observed between 11 and 48 in our series and the most affected age group was 25 years. The majorly affected disease was bowel obstruction. 75% were males and 25% were females. The commonest case was post operative adhesions forming 42.8% of the cases studied. All abdominal emergencies did not require emergency surgical intervention. In our study, 32.35% of patients were treated conservatively.

5. CONCLUSION

Our study shows that appendectomy still remains the commonest non traumatic abdominal emergency. The age incidence of appendicitis in this study shows a definite shift to patients between 15 and 25, accounting for almost 30% of all the cases.

There was a definite male preponderance in the cases studied. Large bowel obstruction with an average age incidence of 50 and a male predominance seems to be a disease of the middle aged. Volvulus and malignancies accounted for all the cases. This conforms to the general view. The incidence of smoking and alcohol was mostly seen in duodenal perforation, ileal perforation and peptic ulcer. Of the gynecological emergencies presented, ruptured ectopic pregnancy and twisted ovarian cyst were the commonest. The age incidence of these two conditions conforms to the general incidence. All abdominal emergencies did not require emergency surgical intervention. In our study, 32.35% of patients were treated conservatively.

CONSENT AND ETHICAL APPROVAL

As per international standard or university standard guideline Patient's consent and ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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