

Original Research Article

RETROSPECTIVE STUDY OF CLINICAL PRESENTATION OF INTESTINAL OBSTRUCTION AND ITS EVALUATION WITH RESPECT TO MORBIDITY AND MORTALITY

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1. Introduction

Since time ancient the strive for food and nutrition for survival has been going on. Charles Darwin in the history also describe the same things when he gave the theory of survival of fittest which conclude that any living creature has more potential to survive when he is healthy and adequately nourished[1]. The nourishment of the body depend upon the quality and quantity of food intake the digestion and absorption of nutrients and essential products from the diet is the work of gastro intestinal tract of any living creature[2].

Since the evolution of human body the diet of we human have markedly changed from previous time. Change in the diet and other factor have changed the acclimatization of gastrointestinal tract and now we eat and digest the food of present times[3]. There are various pathology which occur in gastro intestinal tract and lead to various ailments. In this manuscript we have retrospectively studied the patient of intestinal pathology especially to intestinal obstruction and its clinical presentation and we have tried to evaluate this with regards to morbidity and mortality of these patient[4].

Intestinal obstruction is a surgical condition in which there is blockage in the continuity of gastrointestinal tract which start from oral cavity up to anus. In over study we have taken into account the patient having obstruction of any part of intestine starting from gastro esophageal junction up to anal canal.

The entity of intestinal obstruction in any human being develop because of various reason and there are variable presentation of this pathology. The morbidity suffered by these patients depends upon the level and kind of obstruction[5]. The obstruction of the intestinal continuity at the more proximal end leads to more morbid condition of the patient and causes extremely high mortality if adequate nutritional support is not provided[6].

2. Material and methodology

we studied the bed head ticket retrospectively of these patients admitted in our institution from 2019 till 2022. We have included all the patient of intestinal obstruction of all the age

group starting from neonatal upto geriatric age group. These patients had mechanical and non mechanical causes of intestinal obstruction. There were 100 patients which were included in our study.

AIIMS and objective- 1) To review retrospectively clinical presentation of the intestinal obstruction.

2) To evaluate the pathology of intestinal obstruction in respect to morbidity and also mortality.

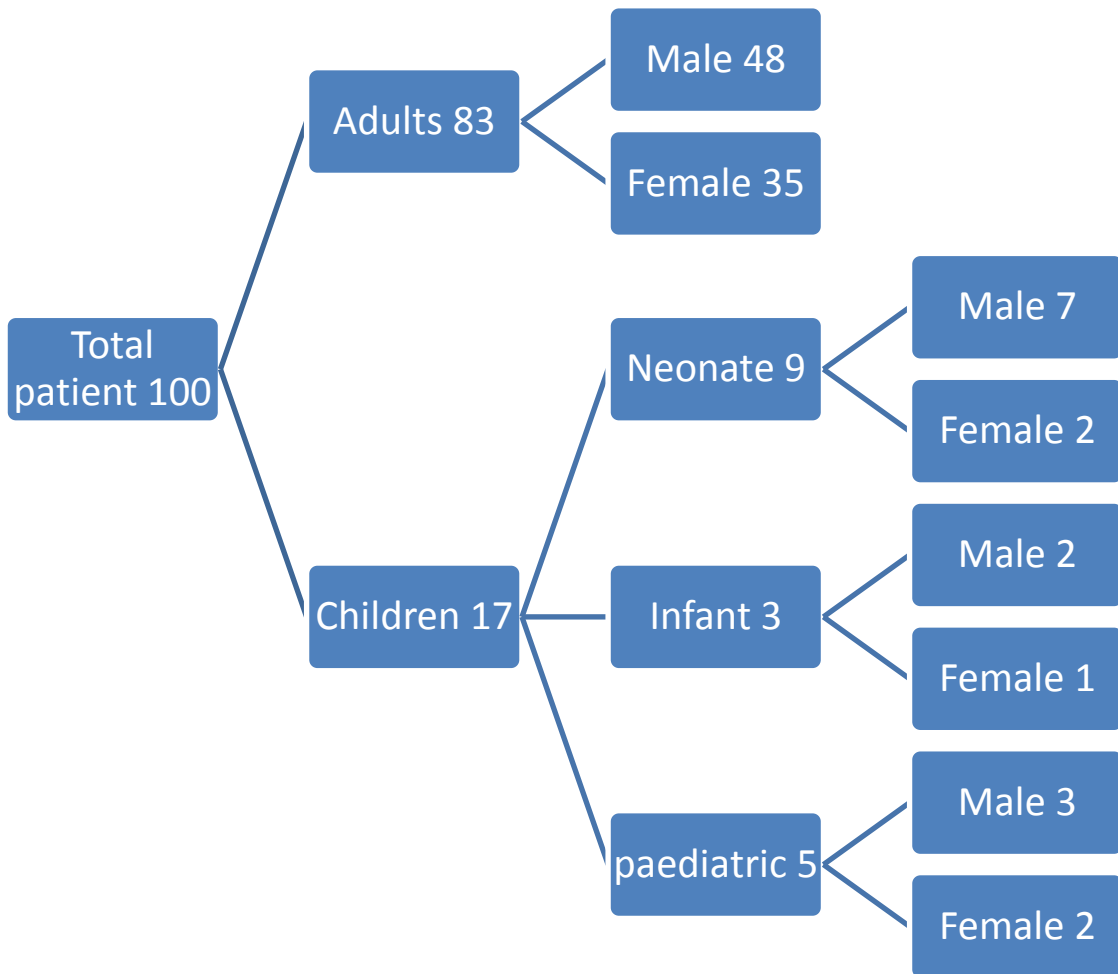
3. Results

In our study we found that more burnt of intestinal pathology is borne by male sex due to various reasons which still require more detailed study. the morbidity was very high in male as compared to female. Secondary complication due to other comorbidity also increases the morbid condition of the patient. The mortality was very high in neonatal, infantile and geriatric age group. In the above mentioned age group also male were found to be more susceptible.

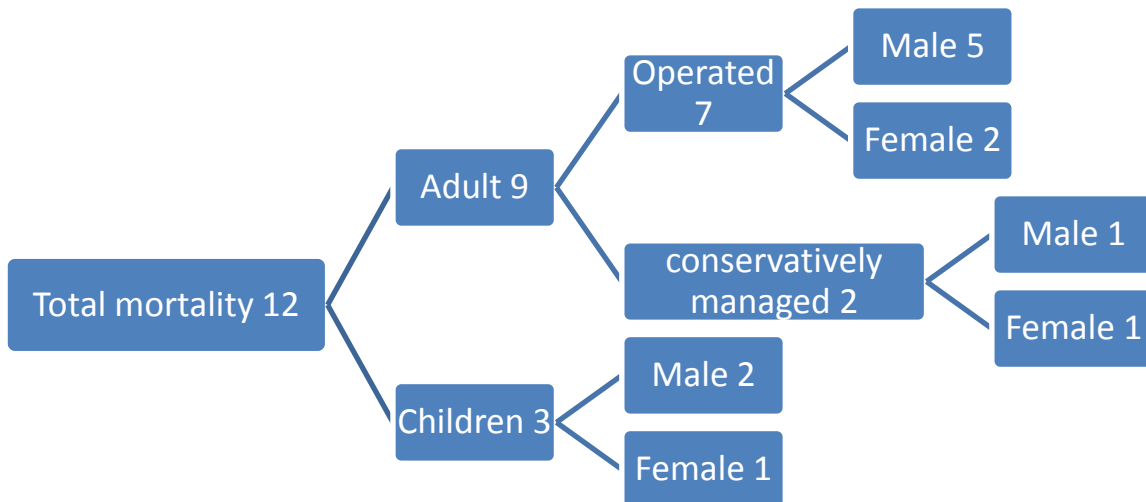
Morbidity found to be associated are as fallow

- 1) Electrolyte imbalance - 58
- 2) Dehydration-34
- 3) Intestinal stoma-27
- 4) Skin excoriation around stoma-19
- 5) Wound dehiscence- 18
- 6) Burst abdomen - 13
- 7) Relaparotomy -5
- 8) Short bowel syndrome -4
- 9) Laparostomy- 3
- 10) Malnutrition

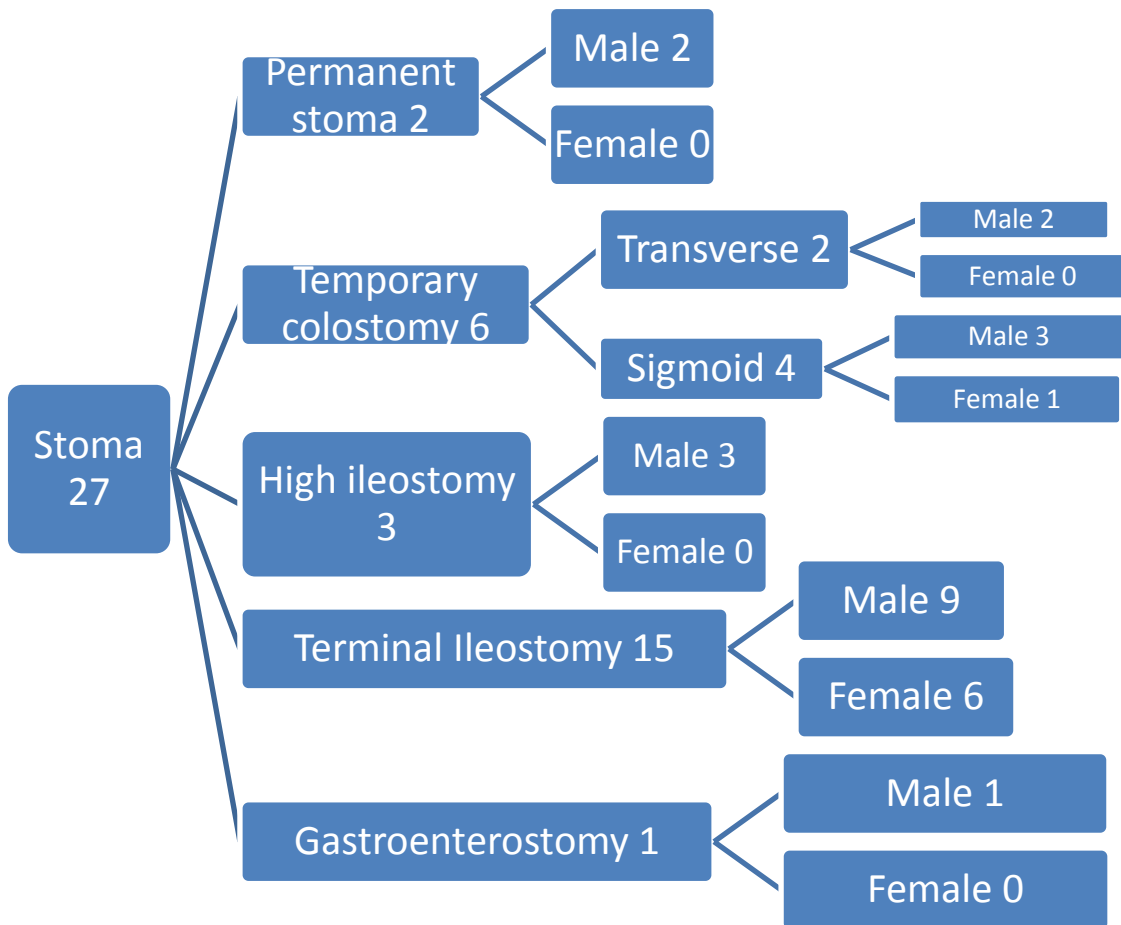
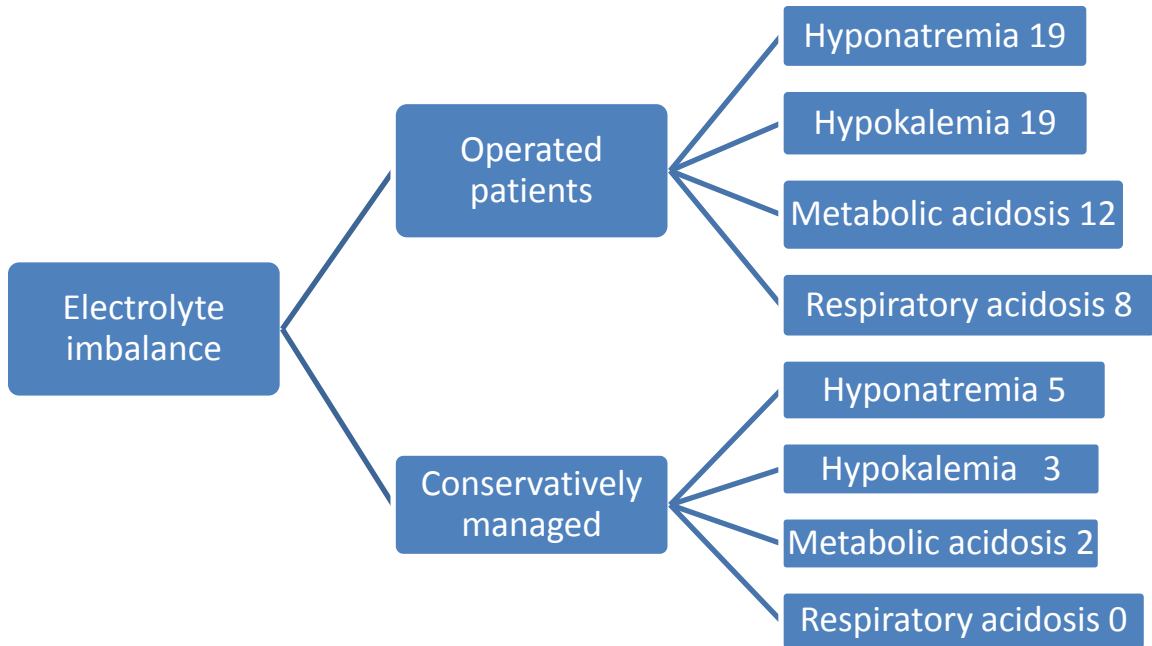
Age and sex distribution-



Mortality distribution –



Morbidity Count –



10) Dehydration at the time of admission:- Nearly 34 patients had feature of dehydration which included highly concentrated urine, oliguria along with decreased skin turgor and shrunken eye.

Other complication :- some patient developed features of confusion, drowsiness possibly because of electrolyte imbalance and 5% patient had episode of hypoglycemia who were not initially known to have diabetes mellitus two patient landed up with acute renal failure who had taken tremendous amount of NSAID and pain killer to relieve the pain of intestinal obstruction. Significant number of patient had hypotension at the time of admission because of loss of fluid by way of vomiting in adequate intake of fluid and water

11) Social stigma:- very briefly we describe this social grievance as morbidity for patient in our region since patient having any kind of enterostomy were highly neglected and outcasted from the society leading to physical mental and emotional trauma ultimately leading to depression and also sometimes mortality of the patient. our observation of this study reviews very high morbidity in patient of intestinal obstruction if not treated timely and high mortality in neonatal, pediatric and geriatric age group however if timely and accurately treatment is given patients could be saved from impending morbidity and mortality.

4. Discussion

Intestinal obstruction is a surgical emergent condition which can affect people of any age group starting from neonatal up to geriatric patients. Various factors have been identified for this condition[7]. On considering neonatal and infancy certain congenital reasons such as intestinal atresia which involves the duodenum, jejunum and ileum and colon are the causes for intestinal obstruction along with this congenital band and sometime annular pancreas, duplication of intestine and intrauterine intussusceptions may also lead to intestinal obstruction. In our study we found that males are more affected by congenital anomalies compared to females and also the chances of survival of male babies is very less as compared to females. However it is a well known fact that female is the better sex to survive on this planet[8]. In infancy and pediatric age group malrotation of intestine and intussusceptions along with congenital band and other reasons such as Hirschsprung's disease, small left colon syndrome, volvulus also lead to obstruction of the intestine in our region (Bundelkhand) intussusceptions and volvulus in infancy and pediatric age group make up the bulk of patients presenting with intestinal obstruction. In children this intestinal obstruction leads to morbid condition such as surgical site infection, wound dehiscence enterocutaneous fistula and stoma related morbidity[9]. It is very hard for a baby or small children to survive this harsh morbid condition of enterocutaneous fistula, wound dehiscence and excoriation and spillage caused by the enterostomy. In spite of all possible efforts to maintain the continuity of the intestine sometime stoma is a life saving procedure but leads to excoriation of a skin around a stoma which causes skin infection and sepsis. If however successful continuity of intestine is maintained by resection and anastomosis there is always a chance of development of post operative adhesions leading to recurrence of intestinal obstruction. In spite of all possible maneuvers and precautions intestinal obstruction goes hand in hand with threatened morbidity[10].

In adult population the morbidity and mortality is as comparable to the pediatric age group but we found that the emotional, psychosocial, physical morbid conditions are markedly high in adult age groups especially in geriatric population.

The formation of stoma is itself highly heart breaking condition which leads to not only physical annoyance but also social out casting of the patient[11]. We have seen patient going into severe depression and loosing there will to live after the near and dear once leave. The patient unattended this morbid condition can be prevented by planning and literacy of patients and their peer group. The planning of a stoma by surgical team along with the relative of patient and literacy of the family to ensure the proper care of the patient with stoma can be prevent this condition. But our country as a whole and specially in our region is having not only the deficiency of surgeon but also lack of trained health professional and of course the knowledge and the literacy rate is very less to understand and cope up with the challenges of maintaining and preserving the patient with a stoma. This post operative grievance which the other describe a complication and morbid condition is nearly faced by 38% of the patient undergoing surgical treatment for intestinal obstruction.

Short bowel syndrome is another dreaded morbid condition which leads to malnutrition, increase frequency of motion, anal fissure and weight loss at very high rate. However this morbidity is faced by nearly 4% of patient and this condition can be successfully treated by regulating the diet and amount of diet taken by the patient[12].

Recurrence of intestinal obstruction requires re exploration is another complication and we found this condition in 7% of the surgically treated patient. Apart from above mention morbidity continuous and intermittent electrolyte imbalance also hampers the life of a patient by various mechanisms such as drowsiness, irritability, leg cramps which the patient face time and again. The other morbid conditions are actually the complication of disease and its surgical treatment.

Mortality in the patients of intestinal obstruction in operated or conservatively treated is significant when the patient is having associated co morbidities. In our study we have noticed nearly 11% mortality in the patients who were operated for intestinal obstruction where as the who were treated conservatively had mortality as high as 14%. The reason which we could analyzed for increase mortality in the patient who were treated conservatively was due to extremely bad general condition of the patients who in spite of aggressive resuscitation could not be brought up to the operation table. This again owes to the co morbidities, late presentation, and inappropriate treatment, and inadequate treatment, illiteracy and low socioeconomic status[13]. We again consider after a thorough study that late presentation was mainly due to ignorance and lack of diagnostic facilities and doctor at initial level that is interior region of Bundelkhand. With regards to the death of the patient who was operated for intestinal obstruction we could owe this to poor vital condition of the patient, existing co morbidities, decreased immunity level because of flourishing bacterial growth and anemic status especially in females. The compromised chest was found to be biggest co morbidities in our region; we do not hesitate to blame smoking specially Bidi as a culprit in our region[14].

5. Conclusion

in this retrospective study of the bed head of the patients we could analyze that male patient do suffer high mortality as well as high morbidity as compare to female patients. The co morbidities leading to increased mortality was also found to be significantly high in males. When considering the children with congenital anomalies are to be blamed for the mortality and morbidity. However both the children who died were operated for the pathology. Thus

we conclude the male are having high mortality and morbidity proportion and in our set up stoma formation is a very significant morbid condition faced by patients being treated by surgical method .this morbid condition or social stigma could be dealt by literacy and adequate information to the general population.

6. References-

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