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Research Article

INDICATIONS AND FREQUENCY OF COMPLICATIONS BECAUSE OF COLOSTOMY

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Abstract:

Objective: The aim of this study was to find out the symptoms & complication frequency with the formation of the colostomy in small aged children.

Methodology: This was an elaborated research work. This study was carried out in the Department of Surgery, DHQ Hospital Faisalabad. The duration of this study was from May 2017 to January 2019. Patients who were undergoing colostomy were the part of this study. The exclusion of the already operate children and or referred children after colostomy carried out from this study. The accomplishment of lop colostomy carried out in all patients. The anomalies and complications after the construction of the colostomy recorded on a Performa.

Results: The formation of 37 colostomies performed in total thirty six patients. Loop colostomies of Sigmoid were present in 51.350%, left & right transverse colostomies were present in 24.320% each. The surgery of all the patients performed because of congenital issues. Total 28 patients found with anorectal malformation & eight patients found with (HD) Hirschsprung's disease. The most frequent issues linked to stoma skin excoriation in 58.820% & stoma prolapse in 50.0. Anemia because of chronic loss of the blood was present in 53.330% patients. A greatest amount of complications found in the transverse loop colostomy in comparison with the sigmoid loop colostomy. Total 13.880% (n: 5) patients met their death because of different complications high fever, septicemia.

Conclusion: The formation of the colostomy in the children is the cause of high rate of complications and issues which is need of the careful method. The method sigmoid loop colostomy is very effectual because it has a very low frequency of the complications. The clinic of stoma care and enterostomal specialist can be effective for the awareness of the families for the care of stoma & to lower the prevalence of the complications.

KEY WORDS: Sigmoid, Enterostomal, Colostomy, Stoma Intestine, Prevalence, Treatment.

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INTRODUCTION:

The stoma of the bowel perform an important role in the administration of the different gastro-intestinal conditions in the children [1]. Colostomy is the construction of the stoma intestine in the children [2] & anorectal malformations are its main indications [3, 4] as well as Hirschsprung's disease [5]. The objective of this method is to divert the stool matter [6]. Opposing to young, it is a temporary method for the children. In the modern countries of the world, primary pull through surgeries are in action for the treatment of the Hirschsprung's disease & anorectal deformities [7-9]. It is not happening in the countries of Asia as well as in Africa. Colostomy is the routine method in the administration of the problem in the children in these countries [1-3, 10].

Colostomy is in use for the treatment of the benign conditions in the children, it is also a temporary condition. There are many severe complications which are the result of the improper method and irregular follow ups [4, 10, 11]. Even after the application of the careful method, we found an identified morbidity & mortality linked with the construction of the colostomy [10-13]. This study performed to find out the symptoms and rate of the complications after the construction of the colostomy in pediatric patients.

METHODOLOGY:

This was an elaborated research work. This study was carried out in the Department of Surgery, DHQ Hospital Faisalabad. The duration of this study was from May 2017 to January 2019. All the patients who already faced the colostomy or its complications were not the part of this study. Investigation with a detail background and physical checkups of all the patients

carried out. In all the patients, the application of transverse loop colostomy or sigmoid loop colostomy performed except in the patients with high abrasions. In most of the patients, ARM (16 / 28) loop colostomy of sigmoid carried out. Left & right transverse colostomy formed in the sick patients because of delayed presentation.

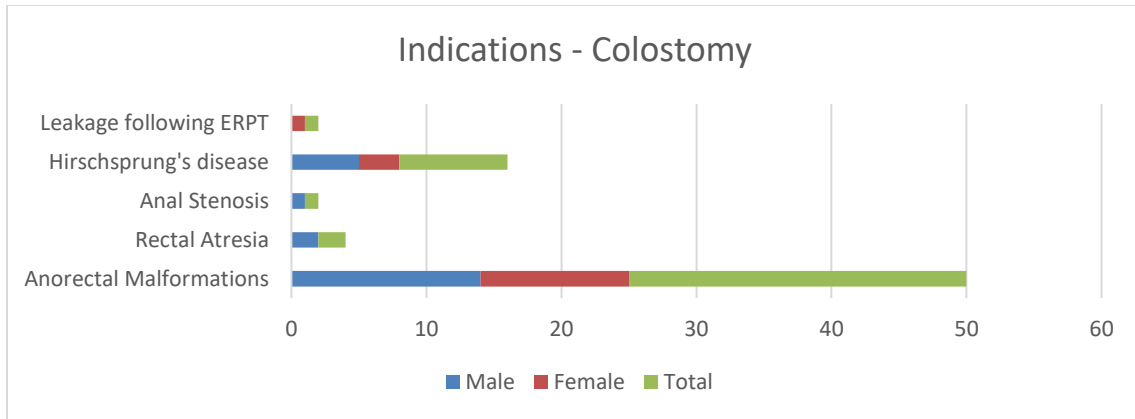
The facility of the histology of frozen section was not available. The extraction of the colon carried out like loop and prevention of the retraction of the loop carried out with the use of the anchoring tube. After the fixation of the loop with the peritoneum & fascia, the opening of the tube carried out in longitudinal way and the stitching of the diathermy & stoma edges carried out with the skin. Different conditions of complications were in record for every patient. The explanation of the care of colostomy told to the parents of the patients.

RESULTS:

Total 37 colostomies performed in 36 patients. Redo stoma formation conducted in one female patient due to leakage. Anorectal malformations were available in 77.770% (n: 28). HD was available in 22.85% (n: 8) patients. Total 22 were the male children and 14 were the female patients. The age of the patients ranged from 1 day to 4 years. Total 21 patients out of 28(75.0%) patients of ARM found with less than five days age at the time of colostomy formation. About 6 days to 4 years was the age of the patients of HD at the time of construction of colostomies. Table-1 displays colostomy indications in patients. Majority of patients with anorectal deformities operated in the department of emergency due the hindrance while majority of HD patients operated electively.

Table-I: Analysis of Colostomy.

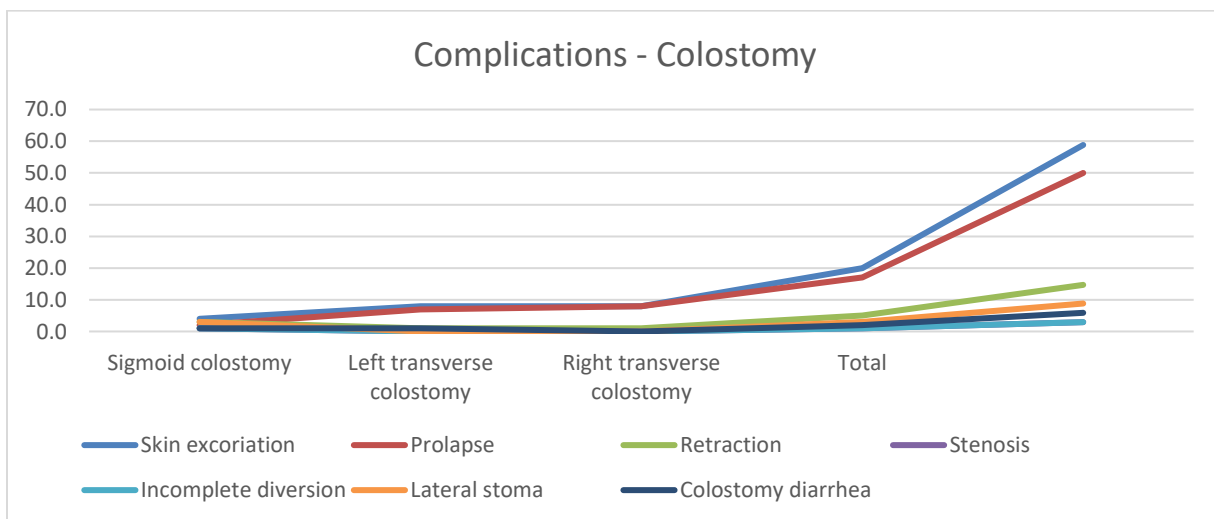
Investigations	No. of patients		
	Male	Female	Total
Anorectal Malformations	14	11	25
Rectal Atresia	2	0	2
Anal Stenosis	1	0	1
Hirschsprung's disease	5	3	8
Leakage following ERPT	0	1	1



In current study, all patients underwent loop colostomies. There were 51.35% (n: 19) Sigmoid, 24.32% (n: 9) right transverse & 24.32% (n: 9) found with left transverse colostomies. Total 3 patients died on 2nd and 3rd day because of septicemia. There was a great bleeding at the time of operation in two patients. We discovered the occasional bleeding from almost all the patients of the study. Total 53.33% (n: 16) patients established anemia on construction of colostomy due to the loss of blood. The problems directly linked with the stoma were available in 23 patients. Skin excoriation was the most common complication happened in 58.82% (n: 20) patients. Prolapse was the next common issue occurred in 50.0% (n: 17) patients. In most of the patients (88.230%), prolapse association found with transverse colostomies. All the complications are available in Table-2. Total 5 patients died in a consequence of abnormalities and complications of this method.

Table-II: Associated Complications of Colostomy.

Complication	Sigmoid colostomy	Left transverse colostomy	Right transverse colostomy	Total	
				No	%age
Skin excoriation	4.0	8.0	8.0	20.0	58.82
Prolapse	2.0	7.0	8.0	17.0	50
Retraction	3.0	1.0	1.0	5.0	14.7
Stenosis	1.0	0	0	1	2.94
Incomplete diversion	1.0	0	0	1	2.94
Lateral stoma	3.0	0	0	3	8.82
Colostomy diarrhea	1.0	1.0	0	2	5.88



DISCUSSION:

Colostomy is a method of saving life of children suffering from ARM & HD and management of these issues shortens the danger of the infections during repair [1, 4, 9]. It is a type of emergency method for the children [3, 12, 14]. Anorectal malformation was the most frequent indication in this research work (77.770%) and HD was following it (22.850%). This finding is similar to the results of many other studies [1-3, 12, 15] but different from the studies of Uba & Chirdan [10] and Nour [11] where they HD as the most common disease. Colostomy formation for acquired circumstances as trauma, tumor & complication of labor are the in the outcome of some research works [1-3, 10]. In current study just like Gauderer, the most preferred procedure was loop colostomy of Sigmoid [16].

We performed the transverse loop colostomy in only those patients who found with high level of illness. There is a tendency of the bleeding in the new births because of the deficiency of vitamin K [12]. Osifo [2] also noted the bleeding from the edge of stoma in his patients of study. Bleeding because of the frictional injuries to exposed colon loop is common [12]. In our patients, we found bleeding in all patients at some stages. All mothers of the children were using the common cloth as a cover on colostomy in this study. Total 53.330% (n: 16) found with the level of Hb established anemia because of chronic loss of blood. This finding is similar to the results of Sheikh [1]. Saleem [13] concluded 4.11% prevalence of this anomaly whereas Chandramouli [17] concluded as 10.30%. Saleem [3] have concluded the 17.980% occurrence of the recurring stoma prolapse. Prolapse concluded by other studies is 20.70% [10], 18.80% [11] & 32% [12]. Nour reported the prevalence of the 73.0% prolapses in a result of transverse colostomy [11]. Various procedures are in use for the control of the prolapse but no method is reliable [2]. Stoma retraction was present in 14.7% patients. Some other studies reported the occurrence from 8.350 to 17.0% [1, 12, 15]. The outcome of this research work is similar to this research work but different from the results of study conducted by Saleem [3]. Retraction of stoma was very frequent in the patients who underwent sigmoid colostomies (60.0%). Total five patients expires due to the complications of this method. The concluded occurrence of the mortality was 3.30% to 16.0% [1, 3, 10-12].

CONCLUSION:

The consideration of the colostomy as a normal method of operation is not better because of its severe outcomes. There should be a preference to the sigmoid loop colostomy because of the high

complication ate of the transverse. A care center of stoma can support in the family awareness & minimizing the anomalies of the stomas.

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