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CLINICAL PROFILE AND MANAGEMENT OF PATIENTS WITH ABDOMINAL WOUND DEHISCENCE

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Abstract:

Objective: *To determine the clinical profile and management of patients with abdominal wound dehiscence.*

Patients And Methods: *A total of fifty patients clinically presented as gaping of abdominal wound and discharge from the site recruited in this one year cross sectional study (2015-16) conducted at tertiary care hospital while the Each case was examined clinically and properly in systematic manner and an elaborative study of history based on chief complaints, significant risk factors, investigations, time and type of surgery performed and postoperative events and day of onset of wound dehiscence whereas the frequency / percentages (%) and means ±SD computed for study variables.*

Results: *During six month study period total fifty patients having abdominal wound dehiscence were explored and study. The mean ± SD for age (yrs) of population was 55.41±8.72. The elective surgery was done in 18 (36%) and emergency surgery in 32 (64%), the hospital stay (days) [mean ±SD] was 24.85 ± 6.73 while the mortality was identified in 08 (16.0%). The procedures leading to abdominal wound dehiscence were perforation closure 28 (56%), resection and anastomosis 10 (20%), appendicectomy 04 (8.0%) and others 08 (16%).*

Conclusion: *The incidence of abdominal wound dehiscence and burst abdomen is more common in patients with vertical incision than in those with transverse incision.*

Keywords: *Wound, dehiscence, surgical intervention*

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INTRODUCTION:

Wound dehiscence is portrayed as incomplete or complete disturbance of an abdominal wound with or without bulge and destruction of abdomen substance. There are two basic types of wound dehiscence, partial or complete, depending on the extent of separation. In incomplete dehiscence, just the shallow layers or part of the tissue layers revive [1]. In complete injury dehiscence, all layers of the injury thickness are isolated, uncovering the hidden tissue and organs, which may distend out of the isolated injury [2]. This can be seen in some cases of abdominal wound dehiscence. It is among the most dreaded complications faced by surgeons and of greatest concern because of risk of evisceration, the need for immediate intervention, and the possibility of repeat dehiscence, surgical wound infection and incisional hernia formation. Abdominal wound dehiscence is a serious postoperative intricacy, with death rates detailed as high as 45%. Occurrence as portrayed in writing ranges from 0.4 to 3.5% [3]. Different hazard factors are liable for wound dehiscence, for example, crisis medical procedure, intraabdominal contamination, lack of healthy sustenance (low albumin and iron), propelled age >6 5 years, systemic diseases (uremia, diabetes mellitus) and so forth. Great information on these hazard factors is compulsory for prophylaxis [4]. Mortality and grimness as drawn out emergency clinic remain, expanded financial weight on social insurance assets and long haul difficulty of incisional hernia can be diminished by featuring the hazard factors for wound dehiscence, the rate and therapeutic measures to forestall or lessen the frequency of wound dehiscence.

PATIENT AND METHODS:

A total of fifty patients clinically presented as gaping of abdominal wound and discharge from the site recruited in this one year cross sectional study (2015-16) conducted at tertiary care hospital while the Each case was examined clinically and properly in systematic manner and an elaborative study of history based on chief complaints, significant risk factors, investigations, time and type of surgery performed and postoperative events and day of onset of wound dehiscence. The inclusion criteria of the study were the patient more than 18 years of age and either gender presented with abdominal wound dehiscence after undergoing elective or emergency operation and the individuals who are ready for investigations and treatment for their condition. An elaborative study of these cases with regard to date of admission clinical history regarding the mode of presentation, significant risk factors, investigations, time of surgery and type of surgery and postoperatively, study of diagnosis and day of diagnosis of wound dehiscence is done till the patient is discharged from the hospital. Details regarding the clinical diagnosis, whether the operation was conducted in emergency or electively, type of incision taken were noted. Intraoperative findings noted and classification of surgical wounds done accordingly. The type of surgical procedure done was recorded. The data was collected on pre-designed proforma and analyzed in SPSS to manipulate the frequencies and percentages.

RESULTS:

During six month study period total fifty patients having abdominal wound dehiscence were explored and study. The mean ± SD for age (yrs) of population was 55.41±8.72. The demographical and clinical profile of study population is presented in Table 1.

TABLE 1: THE DEMOGRAPHICAL AND CLINICAL PROFILE OF STUDY POPULATION

Parameter	Frequency (N=50)	Percentage (%)
AGE (yrs)		
20-29	08	16
30-39	12	24
40-49	10	20
50-59	14	28
60+	06	12
GENDER		
Male	32	64
Female	18	36
RESIDENCE		
Urban	33	66
Rural	17	34
SURGERY		
Elective	18	36
Emergency	32	64
HOSPITAL STAY (days) [mean ±SD]	24.85 ± 6.73	
MORTALITY	08	16.0
PROCEDURES LEADING TO ABDOMINAL WOUND DEHISCENCE:		
Perforation closure	28	56
Resection and anastomosis	10	20
Appendicectomy	04	8.0
Others	08	16

DISCUSSION:

In a study conducted between 2007, 3500 abdominal laparotomies where performed showed the incidence of abdominal wound dehiscence more commonly male population 60% [5].

The former study showed male 75% and female 25% patients [6]. In a study conducted at Institute of medical science Pakistan showed that 72% of the patients who developed abdominal wound dehiscence had undergone surgery in emergency [1].

In a study conducted in 2001 shows that the incidence of abdominal wound dehiscence and burst abdomen is more common in patients with vertical incision than in those with transverse incision [7]. Postoperative abdominal wound dehiscence can be prevented by improving the nutritional status of the patient, strict aseptic precautions, avoiding midline incisions, improving patients respiratory pathology to avoid postoperative cough and by proper surgical technique [8] while the patients with these risk factors require more attention and special care to minimize the risk of occurrence.

CONCLUSION:

The incidence of abdominal wound dehiscence and burst abdomen is more common in patients with vertical incision than in those with transverse incision. Emergency procedure is prone for burst abdomen.

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