



A CLINICAL AND SURGICAL STUDY OF INCISIONAL HERNIAS IN A TERTIARY HOSPITAL IN MANGALORE

General Surgery

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ABSTRACT

The organs of the abdomen are present in their destined place because of the intra-abdominal pressure. The pressure has to be maintained all the time for the organs to stay and is the primary function of the surgeon when conducting an intra-abdominal surgery. The surgeons has to be well versed with Langer lines and also the direction of the subcutaneous collagen fibers as any disturbances may result in incisional hernias. A Sincere effort has been put to understand the clinical and surgical factors that may be a synergistic factor for the formation of the incisional hernias. This study is intended to help the practicing surgeons.

KEYWORDS

Incisions, Hernias, Clinical, Surgical.

INTRODUCTION:

Hernias caused by the previous surgical incisions and thus resulting in the displacement of the abdominal organs out of the cavity is called as incisional hernias¹.

The organs of the abdomen are present in their destined place because of the intra-abdominal pressure. The pressure has to be maintained all the time for the organs to stay and is the primary function of the surgeon when conducting an intra-abdominal surgery. The surgeons has to be well versed with Langer lines and also the direction of the subcutaneous collagen fibers as any disturbances may result in incisional hernias. The knowledge of directions of the muscle fibers is also necessary because a cut in the muscles perpendicular to these lines results in gaping or tension wounds and thus results in the incisional hernias. About forty five to fifty percent of the patients report to the OPD after surgeries within a span of two to three years^{2,3} and about seven percent of the total of patients who underwent abdominal surgeries will have to undergo the same fate.^{4,5,6,7,8}

Any factors that contribute to the rise in the intra-abdominal pressure also results in the same through a compromised abdominal wall strength.⁹ Incisional hernias are most common in the mid-line incisions and also have been reported in the para-medial straight incisions^{2,3}. In order for a good exposure curved incisions are the present trend. Even Gynaecology practices lower end curved incisions⁴. Also before blood planes was preferred. Now a days good blood supplied planes are preferred so as to get a good nourishment for the scar tissue which will be formed at a later date.

A Sincere effort has been put to understand the clinical and surgical factors that may be a synergistic factor for the formation of the incisional hernias. This study is intended to help the practicing surgeons.

AIMS AND OBJECTIVES:

To understand the clinical and surgical factors that may be a synergistic factor for the formation of the incisional hernias

MATERIALS AND METHODS:

This sample study was 60 patients who underwent various abdominal surgeries for different pathologies.

The study was done in the Department of General Surgery from Oct 2013 to January 2015 in Kasturba Medical College, Manipal, MAHE University.

INCLUSION CRITERIA:

1. The age of the patients ranged between thirty years and Seventy

years. This was done to reduce the age related bias.

EXCLUSION CRITERIA:

1. Patients who were on chemo therapy or any immuno suppressant drugs.
2. Patients with muscular dystrophies.

All the statistics have been conducted using the latest SPSS software 2015. (California)

RESULT:

Table 1: Mean age of the population:

	Mean	Range	Std. Deviation
age	51.16	30-70 years	14.95

Image 1: Sex distribution:

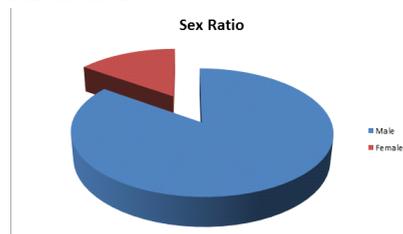


Image 2: Signs

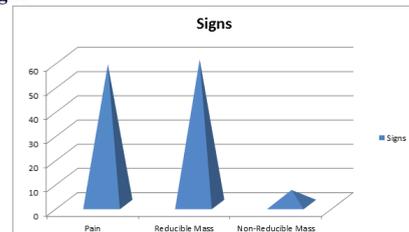


Table 2: Significance

	X-Value	p-Value	Significance
Pain (58)	0.736	0.0026	Significant
Non-Reducible Mass	Absolute Significance	--	--

Table 3: Co-Morbid conditions

Presentation	Number
Cough > 21 days	31
Constipation > 15 days	20
Intra - abdominal masses	01

Table 4: Locations through which the hernia occurred.

Locations:	Number
Lower abdominal Incision (Gynecological)	18
Mid – Line abdominal Incision	32
Right Para - median	04
Left para - median	06

Table 5: Size of the Hernial Defect

Locations:	Number
0-5 cms	18
5-10 cms	41
>10 cms	01

Treatment Modalities: All the one hundred percent of the cases were repaired using Mesh Repair.

None of the cases returned with the same complaint after 6 months of follow up.

DISCUSSION:

The mean age of the population was found to be 51.16 years. The range was found to be thirty to seventy years. The standard deviation was found to 14.95 years. The sex ratio was found to be 18 males and 42 females.

The most common symptom was found to be pain which was statistically significant. Even Reducible mass was found to be statistically significant. Co-Morbid conditions were found to have a significant effect on causing the incisional hernia. The most common was mid line abdominal incisional hernia. This is because previously the linea alba was cut which was the weakest part of the abdomen. It was followed by lower abdominal incisions. Right and left paramedian incisions have less common incidence of hernias. The size of the hernias in majority of the cases was found to be between 5 to 10cms. The study is in agreement with the other studies conducted by

CONCLUSION:

In this study the demographic pattern and the most common clinical and surgical factors that is thought to be directly involved with the condition has been reported. Proper treatment at the given time is the necessity of the hour. The patient tends to neglect sometimes and ultimately end up with complications. So the necessary precautions have to be taken by understanding the complications involved. Bessa SS et al, Cuschieri A et al, Bucknell TE et al and Mudge M et al.^{4,5,7,8}

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