

OUTCOMES OF ABDOMINAL WALL RECONSTRUCTIONS WITH AND WITHOUT UNDERTAKING EXCESSIVE SKIN EXCISIONS IN A SINGLE SURGEON'S PRACTICE

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Introduction

Abdominal wall reconstruction has become a frequently used term to describe hernia repairs that try to re-create the abdominal wall and restore function and structure. The integrity of the abdominal wall is vital as it serves to protect the internal organs. Also, it helps in the performance of different bodily functions and help to maintain the posture.

Aim of the study

To examine the outcome of abdominal wall hernia surgery by a single surgeon undertaking complex incisional hernia repairs with and without skin excisions.

Methods

Retrospective analysis was carried out on all incisional hernia repairs where the data was available from 2019 until 2023 covering a 47-month period. Outcomes were measured using statistical analysis in terms of length of stay (LOS) and wound infection rates between those patients who underwent a skin excision or not, in addition to comparison made between those who had a BMI >30 and <30. Statistical analysis was undertaken with IBM SPSS using Pearson chi-square test for categorical values and One Way ANOVA for numerical variables. Statistical significance was defined as $p < 0.05$.

Before Surgery



After Surgery



Results

94 patients underwent surgery over a 4-year period (23 cases per year), with a median age of 57 years (range 24-88); 52 (55%) patients did not undergo a skin excision and the remaining 42 (45%) underwent a skin excision. Patients with no skin excision had significantly shorter LOS compared to patients with skin excision (mean 2.8 days vs 6.8 days, $P=0.023$); no difference in total complication rates between the 2 groups was observed (21.1% v 21.4%, $p=1.000$). There appear to be no correlation between skin excision and wound infection (13.5% v 7.1%, $p=0.503$). Patients with a BMI >30 ($n=10$) compared to those with a BMI <30 ($n=84$) had significantly higher total complication and wound infection rates ($p<0.001$). This, however did not have any impact on the LOS, which was not significantly higher on patients with high BMI ($p=0.962$).

Discussion

In a busy single surgeon practice, having a skin excision increased the LOS in hospital, but with no increase in the wound complication rate. A higher BMI of >30 increases the likelihood of having any complication with Abdominal wall surgery.