Abdominal wound dehiscence following laparotomy: How to minimize the wound failure?

In surgery, laparotomy is one of the commonest performed procedures. Abdominal wound dehiscence is not an uncommon outcome following laparotomy in surgical practice. Although this complication does not add much to the mortality of surgical patients, it significantly escalates the post surgery morbidity. Furthermore, it adds up to the substantial prolongation of hospital stay which consequently demands an added care from our resources which are already meager in supply.

There are various factors that are identified and associated for the abdominal wound failure leading to abdominal wound dehiscence such as surgeon’s wound closure technique, patient’s general condition, local wound site status and wound management principles.

A simple rule of thumb to minimize abdominal wound dehiscence is to prevent it. A surgeon must consider the wound closure step of laparotomy as an important step of surgical procedure and perform it meticulously. In academic institutions, the surgeons must teach their residents about standard wound closure technique and wound management. Any abdominal wound closure following laparotomy by a trainee surgeon must be performed under strict supervision. Abdominal closure technique should not be followed just as a local ritual but it should be planned and performed based on scientific evidence. For instance evidence from meta-analysis\(^1\) suggests that continuous closures with non-absorbable suture should be used to close most abdominal wounds. However, if infection or distention is anticipated, interrupted absorbable sutures are preferred. Similarly, the mass closures are considered superior to layered closures. In cases where there are three or more risk factors identified for wound dehiscence, internal retention sutures are recommended. In elective planned laparotomy, the correction of hypoalbuminemia, anemia and malnutrition would reduce the risk of abdominal wound dehiscence. In emergency laparotomy, the post operative wound care, avoidance of prolonged cough and control of post operative nausea and vomiting is considerably essential.

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REFERENCES