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Others

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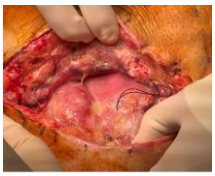
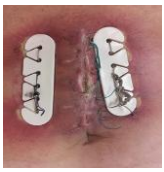
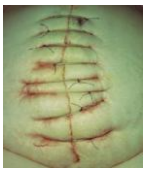
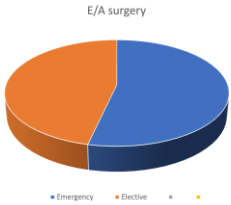
Burst abdomen solution – is approach of general and hernia surgeons different?

Fascial dehiscence after laparotomy is rare but serious complication of abdominal surgery with high morbidity and mortality rate. Similarly, temporary abdominal closure and management of open abdomen requires high level of surgical skills and complex approach. Hernia surgeons, performing general surgery, might be more courageous in introducing novel procedures and approaches in burst and open abdomen management. The aim of this research was to evaluate all cases of laparotomy dehiscence and describe variabilities of methods.

This was a single-centre retrospective study, evaluating all cases of laparotomy dehiscence, in the period of January 2022 – December 2024. The aim was to find out dehiscence rate, identify risk factors, 90-day mortality, and describe differences between procedures performed by general/hernia surgeon.

Results

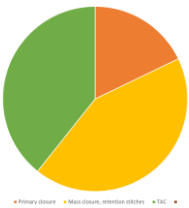
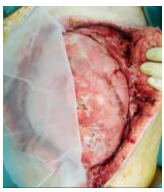
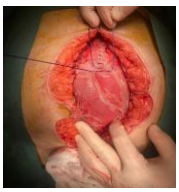
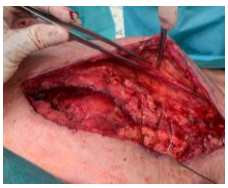
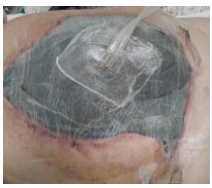
28 patients with laparotomy dehiscence in the period of 3 years were identified; it is less than 1 % of all laparotomies. Emergency laparotomy, midline and pararectal laparotomy, surgery for malignity, and previous SSI, were identified as risk factors. 90-day mortality was 18 %. 1 patient developed re-dehiscence followed by enteroatmospheric fistula.

Burst abdomen risk factors

Patient-related factors: emergency laparotomy, malignity, age, co-morbidities (diabetes mellitus, obesity, COPD, corticoids, hypoalbuminaemia), peritonitis, SSI, smoking

Surgeon-related factors: localization of incision, suture typ1e and material, suture tension

General surgeons mostly performed „traditional“ immediate mass closure technique and mass supporting or rerention stitches. Hernia surgeons performed advanced procedures and combination of techniques including delayed fascial closure, negative pressure wound therapy, mesh-mediated fascial traction, component separation techniques, or combination of these techniques; shortened wound healing and length of stay were observed.

Conclusions

Similar findings as dehiscence rate, mortality and risk factors were described in the literature. A general surgeon´s approach to the open/burst abdomen solution is much more conservative and traditional, compared to a hernia surgeon. It seems not to be an easy task to convince some surgeons about benefits of new approaches. A standardized protocol, according to EHS guidelines for burst abdomen, needs to be created, accepted and it´s effectiveness should be verified.