Main text

Liver transplantation has transformed the outcome of patients with chronic liver disease and survival continues to improve with 5-year survival now being well above 70%(1). However, liver transplant is associated with a risk of long-term complications and optimising longterm medical care has become crucial to improving survival and guality of life. Similarly, surgical complications such as incisional hernias (IH) are common post liver transplant and avoiding their development or optimising their management are key factors in optimising transplant outcomes. The incidence of complications post liver transplant is usually best addressed by national transplant registries. However, these often lack detail of patient variables affecting outcome and hence large single centre databases may provide useful insight. Incisional hernias post liver transplantation usually occur 18-24 months after the original operation, affect mainly males and are related with wound infection and obesity(2). There have been major controversies on the optimal management of IH for over 30 years(3) and these are particularly relevant in the high risk patient population undergoing liver transplant. High quality studies which can lead to a reduced incidence or improved methods of repair are essential.

Cos et. al.(4) present a single-centre, 13-year experience of 163 incisional hernias following liver transplant. The median time from transplant to hernia diagnosis was 19.6 months. Male gender was confirmed as a risk factor. Interestingly enough, acute cellular rejection

(ACR) was inversely correlated with the development of incisional hernia. The authors postulate that patients in better clinical condition including nutritional status, had a sounder immune system and thus had a higher incidence of ACR and lower incidence of hernias. However, the levels of maintenance immunosuppression were not analysed between those developing and those not developing IH, therefore this could be a spurious association. Seventy patients underwent surgical repair which represented 43% of the incisional hernia population. The reason behind the selection of those for surgery and the evidence of benefit from surgical intervention in terms of quality of life is key and was not provided. However, the recurrence rate of 14.3% highlights that even within a specialist centre current techniques of surgical repair are far from optimal. Recurrence was not statistically significantly different between repairs with and without mesh, however this is likely to reflect the small numbers in the study as recurrence without mesh repair was 43% compared with 11% following mesh repair. Few patients underwent laparoscopic hernia repair, but as the authors underline, this requires significant expertise and current evidence is inadequate to support one approach or the other.

Overall, Cos et al, present a large single centre cohort, provide adequate details of perioperative management and report their findings regarding predisposing factors upon extensive and thorough multifactorial analysis. Although selection of technique, with or without mesh, open or laparoscopic, was based on surgeon preference and might thus convey bias in results, it does reflect current practice around the world. This study cannot be used to guide clinical practice but has identified the importance of IH as a post-transplant complication and has provided a useful basis on which to construct prospective studies aimed at avoiding the development or improving the surgical treatment of IH post liver transplant.

References

1. Kwong A, Kim WR, Lake JR, Smith JM, Schladt DP, Skeans MA, et al. OPTN/SRTR 2018 Annual Data Report: Liver. Am J Transplant. 2020;20 Suppl s1:193-299.

2. de Goede B, Eker HH, Klitsie PJ, van Kempen BJ, Polak WG, Hop WC, et al. Incisional hernia after liver transplantation: risk factors and health-related quality of life. Clin Transplant. 2014;28(7):829-36.

3. Sanders DL, Kingsnorth AN. From ancient to contemporary times: a concise history of incisional hernia repair. Hernia. 2012;16(1):1-7.

4. Cos H, Ahmed O, Garcia-Aroz S, Vachharajani N, Shenoy S, Wellen JR, et al. Incisional Hernia after Liver Transplantation: Risk Factors, Management Strategies and Long-Term Outcomes of a Cohort Study. Int J Surg. 2020.