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A Commentary on "Postoperative outcomes in elderly patients undergoing pancreatic resection for pancreatic adenocarcinoma: A systematic review and meta-analysis" (Int J Surg 2019;72:59-68.)

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The elderly group of population is rapidly growing in many countries and is estimated to double by the year 2040. With it the number of diagnosed pancreatic cancers will grow as more than 40% of pancreatic cancers are diagnosed in this age group (1,2,3). Surgical resection remains the only option with curative potential to pancreatic cancer and the question of when to draw the line remains controversial and unanswered (1,4).

The most recent meta-analysis and systematic review by Tan and Sandroussi showed comparable short- and long-term outcomes of pancreatic surgery in the elderly (over 70 years of age). The study included 919 elderly patients and 3941 non-elderly patients where the differences between the two groups were a higher ASA score and cardiovascular comorbidities in the elderly group. Despite that, postoperative morbidity and mortality remained significantly comparable between the two groups except for respiratory complications which were higher in the elderly group(1).

The data presented corresponds with the majority of the published literature in that in a retrospective analysis of 556 patients undergoing pancreatic resection, there was no difference in post-operative morbidity and mortality between the elderly group (>75 years) and the non-elderly apart from a significantly lower incidence of pancreatic fistulas in the elderly group (4).

In a recently published 20-year single-center experience to evaluate age as an independent risk factor for mortality and morbidity post pancreatic resection that included 929 patients who underwent 934 pancreatic resections. 197 patients comprised the elderly group (>75years) and were found to have higher ASA scores and cardiovascular and respiratory comorbidities. The 90-day post-operative mortality rates in both groups were similar with no significant differences, but the morbidity rate was higher in the elderly group, particularly cardiac (17% vs 9% in the non-elderly group) and pulmonary complications (15% vs 11% in the non-elderly group) (2).

Another series of 50 patients in a high-volume center underwent hepatic and pancreatic resections over a 1-year period showed no significant differences in post-operative morbidity or mortality between the elderly and non-elderly groups (>85 and <85 years respectively) (3).

Current evidence suggests for safety and feasibility of pancreatic resection in the elderly group of patients, age alone is not associated with higher risks of increased perioperative morbidity and mortality. The increased incidences of cardiovascular and pulmonary complications in this age group can be explained by the increased incidence of comorbidities in this group. There is paucity of data comparing the outcomes in the two age groups with adjustment of comorbidities which might shed some light onto the question of age as a risk factor in pancreatic surgery.

In conclusion, careful selection and a tailored individualized approach to elderly patients requiring pancreatic resection and preoperative optimization of pre-existing comorbidities are keys to safe pancreatic surgery in this age group. The current literature however fails to advise when not to perform major cancer surgery on the elderly.

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