

## **Feasibility and Results of Radical Surgery and Adjuvant Therapy in Patients Older than 70 Years with Pancreatic Adenocarcinoma**

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**Context** High morbidity rates following pancreatic surgery and adverse effects of chemo-radiation treatments still make surgeons and oncologist reluctant to candidate elderly patients to these surgical or medical therapies. **Objective** Evaluation of postoperative outcomes and adjuvant chemo-radiation protocols adherence among over 70-year-old patients with pancreatic adenocarcinoma (PDAC) treated in a referral center for pancreatic disease. **Methods** Between January 2010 and May 2013 we performed 161 pancreatic resection for PDAC (including invasive IPMN): 106 pancreaticoduodenectomies (PD), 44 left spleno-pancreatectomies (LP), and 11 total pancreatectomies (TP). In the present study we focused on over 70-year-old patients treated with surgery and, successively, candidate or not to adjuvant therapy. We prospectively recorded data about perioperative outcomes as well as patient's adherence to planned chemo-radiation schedules. **Results** In our series over 70-year-old patients were 75 (47.2%). Median age at surgery was 76 years (range: 70-85 years). Thirty-one patients (41.3%) had ASA  $\geq 3$ . Mean BMI was 23.6 kg/m<sup>2</sup>. Forty-seven patients received PD, 21 had LP, 7 underwent TP. Overall morbidity was 48% (Clavien Dindo  $\geq 3$ : 12%); POPF was 13.3% (ISGPF B-C: 4.4%); biliary fistula rate was 5.5%; DGE rate was

nihil; PPH was 5.3% (4 cases, 2 of them requiring reintervention); medical complications were 14.5%; reintervention were 5.3% (4 cases); mortality was 1.3% (1 case). Median LOS was 10 days (range: 5-31 days). Patients candidate for adjuvant treatment were 39 (52.0%): 25 chemotherapy (64.1%), 6 radiotherapy (15.4%), 8 combined chemo-radiation (20.5%). Of the other patients, 27 (36.0%) were not enrolled in any adjuvant schedule after surgery, 8 (10.7%) resulted stage 0-I at histology and 1 (1.3%) died during surgical hospitalization. Among patient undergoing chemotherapy, 70% received gemcitabine, 9% PEX-G, and 6% GemOx. Thirty-three percent of the patients experienced low grade toxicity (G1-2), while 18% had high grade (G3-4). Twelve percent of the patients could not complete the schedule because of toxicity or disease progression during the treatment. Median survival after surgery was 25 months. **Conclusions** The morbidity and mortality rate we observed in elderly patients is acceptable and aligned with data reported in larger series. In a similar way, adjuvant treatments toxicity appeared limited, and patients adherence to scheduled therapy adequate. An accurate preoperative and postoperative assessment, referring to biological more than chronological age, is mandatory in evaluation of cases eligible to surgery and adjuvant treatments.