Pancreatic Frozen Section in Distal Pancreatectomy: Verona Experience with Harmonic Focus®

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Context
Pancreatic head resection is performed with low mortality, but morbidity remains high. Extensive preparation, long operating times, intraoperative blood loss and the need for blood transfusions are risk factors for post-operative morbidity. Many authors demonstrated that the use of an ultrasonic dissection device in distal pancreatectomy might significantly reduce operating time, intraoperative blood loss and the need for blood transfusions. Intraoperative frozen section analysis has traditionally played an important role in the surgical management of pancreatic lesions. Currently limited data exist in the surgical literature regarding the accuracy of frozen section analysis for the purpose of determining resectability and assessing final margin status. No data are available about the feasibility of the frozen section performed with the harmonic scalpel.

Methods
A retrospective review was performed for all patients who underwent open, laparoscopic or robotic distal pancreatic resection for cancer (adenocarcinoma or IPMN, or NET) at our institution from 2010 to 2012. The pancreatic transection was effectuated by scalpel or by harmonic scalpel (Harmonic Focus®). Frozen section was performed routinely.

Results
One-hundred and two distal pancreatic resections were performed in our Institution. In 79 patients the pancreatic transection was effectuated by scalpel and in all cases the final pathological diagnosis coincided with the frozen section. In 22 patients, the pancreatic section was performed using the Harmonic Focus®. Two frozen sections resulted negative for neoplastic cell research but were positive at definitive examination.

Conclusion
Use of an ultrasonic dissection device (Harmonic Focus®) in distal pancreatectomy is safe and feasible. The electrocution of the harmonic scalp could distort the frozen section examination so, where possible, we suggest performing the frozen section with the scalpel.