



# Is it possible to predict conversion during minimally invasive pancreatectomy?

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The article entitled “Preoperative risk factors for conversion and learning curve of minimally invasive distal pancreatectomy” is an interesting retrospective study from the Johns Hopkins Hospitals Groups reporting clinical and practical risk factors for conversion during distal pancreatectomy.

I would like to highlight several of the results and discussion points in this manuscript.

First, surgical strategy can be planned mainly by in deep interpretation of the pre-operative workout. Indeed, Hua *et al.* underlined that commonly available preoperative data (diagnosis of malignant disease, need for multiorgan resection, surgeon experience, extent of visceral fat, vascular anatomy) are useful to predict the rate of conversion during mini-invasive distal pancreatectomy. We can imagine that if a patient presents several concomitant risk factors (e.g., malignant disease requiring a multi-organ resection in an obese patient) open surgery should be considered or a surgeon with large experience in mini-invasive surgery should perform the operation. On the opposite site, a benign lesion of the pancreas in a lean patient with a standard vessels anatomy may represent the safe case for a surgeon in training.

Visceral fat and the bulky fatty pancreas are the new enemies of the pancreatic surgeon rejoining the “deadly family” constituted by soft pancreas, thin Wirsung duct and high comorbidity patient. The worldwide epidemic of obesity is changing completely the profile of the typical “pancreatic” patient and we are moving from the lean patient with soft and tiny pancreas to the large patient with massive retroperitoneal fat and bulky friable pancreas (1,2).

Hua *et al.* reported in the manuscript that the excessive intra-abdominal fat was one of the main cause of conversion. Interestingly, the authors confirmed that BMI was not an efficient predictor of conversion and that we should better rely on the pre-operative evaluation (CT scan, MRI) of the visceral abdominal fat.

In term of technique, we should accept that distal pancreatectomy for malignant and not malignant disease shares only a common denomination but they are largely different operations (3,4). Distal pancreatectomy for benign or borderline lesions is a simpler operation, indeed, it does not require complex lymphadenectomy or resection of the retro-portal lamina [radical antegrade modular pancreateosplenectomy (RAMPS) technique] (4). The present manuscript reported a significantly higher rate of conversion in case of distal pancreatectomy for malignant disease.

The “human factor” still be an important element for surgery, even in the setting of high volume hospital adopting standardized techniques. Hua *et al.* confirmed that more is the experience of the operating surgeon less is the rate of conversion.

In conclusion, the present article has shown, once again, that attentive interpretation of preoperative data can assist the surgeon to predict the difficulty of the intervention in case of distal pancreatectomy and that for the most difficult operations “two experienced surgeons are better than one” or at least they may reduce the chance of conversion.

Finally, the significantly different rate of conversion in case of distal pancreatectomy for malignant disease and not

malignant disease should be interpreted as an advice to keep separate, in further, studies the two indications.

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