

Nell, S., Rinkes, I.H.B., Verkooijen, H.M., et al 2018. **Early and late complications after surgery for MEN1-related nonfunctioning pancreatic neuroendocrine tumors**. *Annals of surgery*, 267(2), pp. 352-356.

OBJECTIVE:

To estimate short and long-term morbidity after pancreatic surgery for multiple endocrine neoplasia type 1 (MEN1)-related nonfunctioning pancreatic neuroendocrine tumors (NF-pNETs).

BACKGROUND:

Fifty percent of the MEN1 patients harbor multiple NF-pNETs. The decision to proceed to NF-pNET surgery is a balance between the risk of disease progression versus the risk of surgery-related morbidity. Currently, there are insufficient data on the surgical complications after MEN1 NF-pNET surgery.

METHODS:

MEN1 patients diagnosed with a NF-pNET who underwent surgery were selected from the DutchMEN1 study group database, including >90% of the Dutch MEN1 population. Early postoperative complications, new-onset diabetes mellitus, and exocrine pancreatic insufficiency were captured.

RESULTS:

Sixty-one patients underwent NF-pNET surgery at 1 of the 8 Dutch academic centers. Patients were young (median age 41 years) with low American Society of Anesthesiologists scores. Median NF-pNET size on imaging was 22mm (3-157). Thirty-three percent (19/58) of the patients developed major early-Clavien-Dindo grade III to IV-complications mainly consisting International Study Group of Pancreatic Surgery grade B/C pancreatic fistulas. Twenty-three percent of the patients (14/61) developed endocrine or exocrine pancreas insufficiency. The development of major early postoperative complications was independent of the NF-pNET tumor size. Twenty-one percent of the patients (12/58) developed multiple major early complications.

CONCLUSIONS:

MEN1 NF-pNET surgery is associated with high rates of major short and long-term complications. Current findings should be taken into account in the shared decision-making process when MEN1 NF-pNET surgery is considered.