Hyperplasia to Neoplasia Sequence of Duodenal and Pancreatic Neuroendocrine Diseases and Pseudohyperplasia of the PP-cells in the Pancreas.

Abstract:
Hyperplastic changes of the neuroendocrine cell system may have the potential to evolve into neoplastic diseases. This is particularly the case in the setting of genetically determined and hereditary neuroendocrine tumor syndromes such as MEN1. The review discusses the MEN1-associated hyperplasia-neoplasia sequence in the development of gastrinomas in the duodenum and glucagon-producing tumors in the pancreas. It also presents other newly described diseases (e.g., glucagon cell adenomatosis and insulinomatosis) in which the tumors are (or most likely) also preceded by islet cell hyperplasia. Finally, the pseudohyperplasia of PP-rich islets in the pancreatic head is defined as a physiologic condition clearly differing from other hyperplastic-neoplastic neuroendocrine diseases.