Glucagonoma as a rare case of neuroendocrine tumor of the pancreas: a case report

Zińczuk J.[1 A-D*], Lewoniewska S.[2 B,C,D], Zaręba K.[4 B, C], Pryczynicz A.[3C,E], Guzińska-Ustymowicz K.[3 F]

1. Department of Clinical Laboratory Diagnostics, Medical University of Bialystok, Poland
2. Department of Medicinal Chemistry, Medical University of Białystok, Poland
3. Department of General Pathomorphology, Medical University of Białystok, Poland
4. 2nd Clinical Department of General and Gastroenterological Surgery, Medical University of Białystok, Poland

---

A- Conception and study design; **B -** Collection of data; **C -** Data analysis; **D -** Writing the paper;
E- Review article; **F** - Approval of the final version of the article; **G** - Other (please specify)

ABSTRACT

Introduction: Glucagonoma is a rare neuroendocrine tumor with characteristic features such as the presence of the glucagon-producing tumor, diabetes, and necrolytic migratory erythema.
Case presentation: the 60-year-old patient was admitted to hospital with periodic pain in the right and middle upper abdominal appearing after eating. Laboratory tests presented a high glucose level and anemia. Tumor of the body and tail of the pancreas passing the organ pouch has been found during the surgery. Diagnosis of glucagonoma was confirmed in histopathological examination in immunohistochemical stainings: a positive reaction was observed with chromogranin, synaptophysin and CEA. The proliferative activity of Ki-67 was less than 1%. Staining for glucagon also was positive so confirmed the presence of neuroendocrine tumor - glucagonoma.
Conclusions: Glucagonoma sometimes may occur without characteristic features which may cause delayed diagnosis. Early diagnosis of glucagonoma is important because it increases the chances of successful recovery**.**
Keywords: Glucagonoma, pancreas, neuro-endocrine tumor, diabetes

---

DOI: