Management of hypoglycemia after gastric bypass: a difficult challenge

Silva-Fernández, J; García-Manzanares, A; Gómez-Alfonso, FJ, López-Iglesias, M; Gómez-García, I
Endocrinology and Nutrition Section. Macha Centro General Hospital. Alcázar de San Juan (Spain).

Introduction

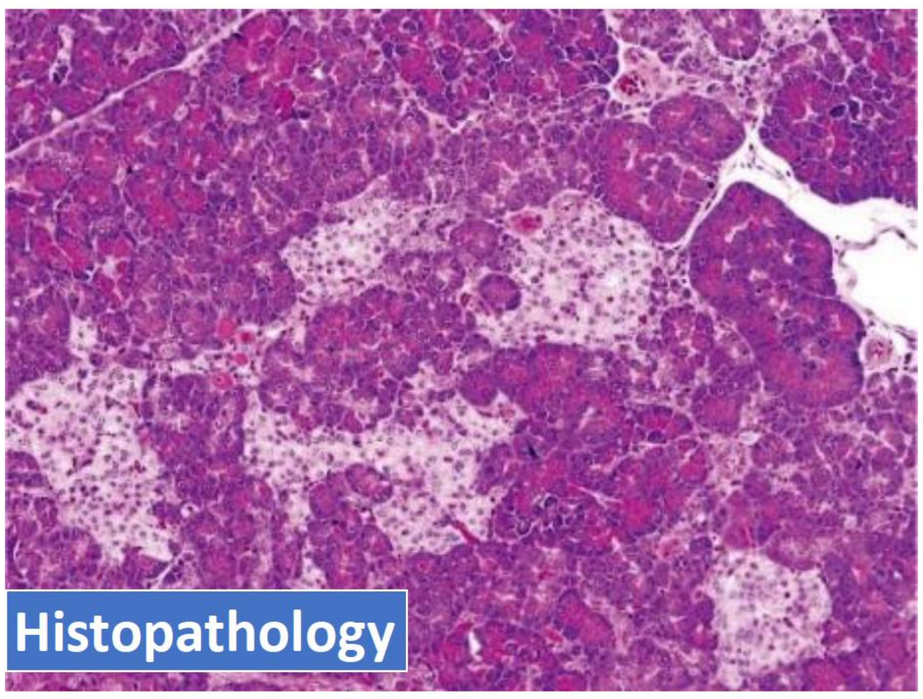
Postprandial hypoglucemia with hyperinsulinism after laparoscopic gastric bypass is an uncommon complication with an estimated prevalence of 0.2%. Its treatment includes acarbose, diazoxide, somatostatin and GLP-1 analogues or calcium channel blockers in case a strict diet does not work.

Case report

A 42-year-old woman with history of gastric bypass in 2005 due to severe obesity (preoperative weight 150 kg) attended our clinic 3 years after surgery reporting hypoglycemic episodes occasionally accompanied by unconsciousness, occurring 3 hours after food intake. The episodes resolved after sugar intake.

ACTH stimulation test ruled out adrenal insufficiency.
A 72 hour fasting test was done with no pathological findings.
A glucose tolerance test was also performed showing hypoglycemia and hyperinsulinism.
A CT scan of the abdomen did not find pancreatic nodules.

Sequence of treatments
Fractionated diet
Acarbose
Lanreotide
Diazoxide
Corporocaudal pancreatectomy
Liraglutide
Total pancreatectomy



Histopathology

After the surgery, no hypoglycemic episodes were observed. Moreover, the patient developed diabetes requiring treatment with insuline.
One year after pancreatectomy the patient had a relapse of hypoglycemia episodes even after insuline withdrawal. An overload test with mixed meal showed hyperinsulinemic hypoglycemia.
Liraglutide 0.6 mg/24 h was prescribed but we had to stop it because of side effects.
The patient was referred to consider a second surgery for total pancreatectomy.

Conclusions

There is no treatment of choice for patients with nesidioblastosis. Medical treatment, including somatostatin and GLP-1 analogues, should be tried before surgery. When medical treatment fails, subtotal pancreatectomy is a good option to control hypoglucemia and preserve pancreatic function. When hypoglycemia persists, total pancreatectomy should be considered.

17 ECE
549--EP
Obesity and cardiovascular endocrinology
Julia Silva-Fernández
DOI: 10.3252/pso.eu.17ece.2015
Poster presented at: ECE2015 16–20 May 2015 DUBLIN, IRELAND 17th EUROPEAN CONGRESS OF ENDOCRINOLOGY