No lesion was found on imaging tests including enhanced A 38

The selective arterial calcium stimulation test

The patient underwent partial (75%)

The selective arterial calcium stimulation test (SACST) result was consistent with a diffuse disease in the body and tail.

Table: Preoperatively performed selective calcium infusion test results of patient.

<table>
<thead>
<tr>
<th></th>
<th>SAD</th>
<th>SAP</th>
<th>GDA</th>
<th>HA</th>
<th>SMA</th>
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SAD: Splenic Artery Distal part SAP: Splenic Artery Proximal part GDA: Gastroduodenal Artery HA: Hepatic Artery SMA: Superior Mesenteric Artery

• A 38-year-old female presented with neuroglycopenic symptoms in the form of drowsiness, inability to speak, numbness in the mouth, and nausea in the last 3-4 months.

• Endogenous hyperinsulinemia was found with recurrent neuroglycopenic symptoms (the glucose level was 25 mg/dl, insulin 43.9 μ/ml, C-peptide 5.54 ng/ml).

• The selective arterial calcium stimulation test (SACST) result was consistent with a diffuse disease in the body and tail.

• No lesion was found on imaging tests including enhanced computed tomography (CT) methods performed with a preliminary diagnosis of insulinoma. A suspicious hyperperfusion was present in the pancreatic tail on the perfusion CT examination performed after obtaining approval.

Figure 1: Head and corpus-tail sections of the pancreas (black arrows) were painted homogeneous in the 40th sec images after the application of water and injection of intravenous contrast material. Focal lesion was not determined and pancreas was stained uniformly in the other phases (images not added).

The patient underwent partial (75%) pancreatectomy and is now followed up as a diabetes patient on intensive insulin treatment at the postoperative 38th month.

Figure 2: A) Microscopic image of an enlarged islet of endocrine pancreas cells with irregular margin from surrounding pancreas tissue (Haematoxylin&EosinX100) B) Pleomorphic islet cells show increased nuclear size with abundant clear cytoplasm and prominent nucleoli (Haematoxylin&EosinX200)

Conclusions

The NIPHS is rarely seen in the adult age group. SACST seems to be the most suitable test to differentiate diffuse or multiple disease from insulinoma and to guide the surgery when advanced radiological imaging methods are inadequate to detect the presence of insulinoma. Regarding perfusion CT, it would be more appropriate to wait for comparative data to be put forward in a more consistent manner. When no response to medical treatment, partial/total pancreatectomy is appropriate treatment option as it enables recovery from the hypoglycemic episodes despite leading to diabetes.
