**BACKGROUND**

Insulinomas are the most frequent cause of endogenous hypoglycemia, occurring in 90 to 95% of these tumours are benign. Occur in 1-4 persons per million of the general population and represent 1%-2% of all pancreatic neoplasms. Surgical excision or resection is the standard treatment. Medical therapy focuses mainly on the use of diazoxide with few alternatives in patients with high surgical risk. Recent data has focused on the promise of Endoscopic ultrasound (EUS) - guided ethanol ablation as a safe and effective method for treating patients with small lesions or who are poor operative candidates.

**CASE-REPORT**

**IDENTIFICATION:**
- 57 years-old
- Retired
- Resident at Coimbra, Portugal

**PAST MEDICAL HISTORY:**
- Acute myocardial infarction
- Stroke with motor sequela
- Pacemaker carrier due to AV block 2nd degree, Mobitz II
- Severe aortic valve disease
- Hypertension
- Dyslipidemia
- Status post-adenocarcinoma of the sigmoid transition - pT4N1M0

**DAILY MEDICATION:**
- Clopidogrel 75mg id
- Enalapril 20 mg +
- Hydrochlorothiazide 12.5 mg id
- Pantoprazole 20mg id
- Trimetazidine 35 mg id
- Carvedilol 6.25mg id
- Simvastatin 20mg id

**CASE PRESENTATION**

1<sup>st</sup> visit to the Emergency Department (ED) in 21/5/2015 due to prostration and confusion → plasma glucose of 50mg/dl and prompt relief of symptoms following the administration of glucose → medical discharge with capillary blood glucose monitoring at home.

2<sup>nd</sup> admission to the ED in 1/6/2015 due to recurrent hypoglycaemia, especially in fasting, with 3 weeks of evolution - capillary glucose measured at home ~ 30 mg/dl.

There was no weight gain associated. No history of diabetes was known.

No use and no access to hypoglycaemic drugs at home.

Plasma measurements in 2/6/2015:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glucose</td>
<td>&lt;50mg/dl</td>
</tr>
<tr>
<td>Insulin</td>
<td>&lt;5 mg/dl</td>
</tr>
<tr>
<td>C-peptide</td>
<td>&lt;10 mg/dl</td>
</tr>
<tr>
<td>Hba1c</td>
<td>5.1%</td>
</tr>
<tr>
<td>SH</td>
<td>13.1 (4.8)</td>
</tr>
<tr>
<td>TSH</td>
<td>1.3 (1.9)</td>
</tr>
</tbody>
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**INVESTIGATION**

**LABORATORY INVESTIGATION**

Plasma measurements in 2/6/2015:

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**IMAGING INVESTIGATION**

**EUS-GUIDED ETHANOL ABLATION THERAPY**

**CONCLUSIONS**

Ethanol ablation therapy of insulinoma is a minimally invasive alternative treatment with low complication rates although with little clinical experience. In high-risk patients, this may be one of the only feasible options with satisfactory clinical results and significant impact on quality of life and survival. There is a possibility to repeat the procedure in patients who maintain symptomatic hypoglycaemic episodes. Prospective, large trials should be performed to better evaluate this technique; its indications and complications before it is recommended for widespread use in clinical practice.

**REFERENCES**

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