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**Educational Abstract**

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**Importance of Clinical, Radiological, and Pathological Correlation in Atypical Insulinoma Diagnosis: Case Report and Literature Review**

**Benedicta Mutiara Suwita<sup>1</sup>, Sahat BRE Matondang<sup>1</sup>, Ening Krisnuhoni<sup>2</sup>**

<sup>1</sup>Faculty of Medicine Universitas Indonesia - Department of Radiology, Cipto Mangunkusumo Hospital, Jakarta, Indonesia.; <sup>2</sup>Faculty of Medicine Universitas Indonesia - Department of Anatomic Pathology, Cipto Mangunkusumo Hospital, Jakarta, Indonesia.

A 30-year-old woman was admitted to our center with seizure at 2 days before admission. Laboratory examination showed hypoglycemia and increased fasting insulin level. She had been admitted to different hospital three weeks ago because of similar symptoms, and was discharged after her brain CT and EEG showed no abnormality.

Abdominal contrast-enhanced CT revealed hypovascular nodule in pancreatic tail. Abdominal contrast-enhanced multiphase MR showed hypointense T1WI, slight hyperintense T2WI nodule with enhancement on arterial phase. Pancreatic duct was not obstructed. Pathological examination after surgery was consistent with neuroendocrine tumors, adenocarcinoma was yet to be ruled out with immunohistochemistry. Blood glucose and insulin level became normal after surgery.

Insulinomas occur in 1-4 people per million in the general population. Clinically, Whipple's triad is the classical finding—delays in diagnosis are common because hypoglycemic symptoms often misattributed to neurological disorder, as seen here. Typical CT finding of insulinoma is hypervascular lesion; however, that was not seen in our patient. MR showed a more typical characteristics of insulinoma. Specificity of MRI is generally superior to CT. Adenocarcinoma may be histologically identical to insulinoma, and could display similar enhancement pattern on imaging. Clinical presentation and several imaging features could help differentiating them.

We described the imaging features of atypical insulinoma and reviewed the available literatures on insulinoma imaging. We could learn that high clinical suspicion, combination of imaging modality and clinical-radiological-pathological findings correlation are important to diagnose insulinoma.