中文題目：泌乳素瘤導致腦下垂體中風—病例報告

英文題目：Prolactinoma complicated with Pituitary Apoplexy: A Case Report

作　　者：許靖玫[1,2]，蔡杰璇[1]，楊善寓[1]，王威傑[1,2]

服務單位：[1]中山醫學大學醫學系，[2]中山醫學大學附設醫院內科部內分泌暨新陳代謝科

Introduction: Patients with prolactinoma usually presented with symptoms of endocrine dysfunction such as infertility, decreased libido, and galactorrhea. Pituitary tumor compressive symptoms such as headache and visual changes were not uncommon. Pituitary apoplexy, a rare clinical syndrome secondary to abrupt hemorrhage is considered an endocrine emergency and also usually presented with a headache. We report a case of a girl with prolactinoma accompanied by pituitary apoplexy, which is not easily identified in the clinical setting.

Case Presentation: A 14-year-old girl, with a past medical history of Tourette's syndrome presented to the hospital because of a lack of menarche. She experienced intermittent headaches with general malaise for 1 month. The headache characteristic was diffuse without a specific location or aura. She denied trauma history, nausea, vomiting, fever, or blurred vision. Physical examination showed body height and weight were 156 cm and 46 kg (in the 15-50th percentile). Her Tanner staging of breast and pubic hair were 3 and 4, respectively. Breast development was normal without milky discharge. Laboratory analysis revealed elevated prolactin (290.69 ng/mL), decreased IGF-1 (194 ng/mL), and estradiol (E2) level (<10 pg/mL). Ultrasound evaluation showed normal uterus structure. Ophthalmologic examination showed no obvious optic nerve compression, but the visual field test showed a faint temporal defect of the right eye. Brain magnetic resonance imaging (MRI) study revealed pituitary adenoma with a 1.3x1.0x1.0 cm cystic lesion complicated with pituitary apoplexy. Therefore, an emergent endoscopic transsphenoidal adenectomy was performed immediately. Post-operation lab data showed a significant improvement in prolactin level (2.01 ng/mL).

Discussion: Pituitary apoplexy, a rare clinical syndrome secondary to abrupt hemorrhage or infarction, complicates 2%-12% of pituitary adenomas, especially nonfunctioning tumors. In other words, pituitary apoplexy is uncommon in prolactinoma, but shared some similar symptoms such as headache and blurred vision. Clinical physician should pay close attention to avoid misdiagnosis, which might lead to mortality and morbidity.

Hyperprolactinemia can cause by pregnancy, antipsychotic drugs, primary hypothyroidism, and prolactinoma. Symptoms and signs of high prolactin secretion included amenorrhea, galactorrhea, low bone mass, headache, and visual field defect. Prolactin levels higher than 250 μg/liter strongly suggest the presence of a prolactinoma. Dopamine agonists are the first-line treatment for the majority of patients. However, transsphenoidal surgery is preferred if patients were resistant to medical therapy or present with pituitary apoplexy. Diabetes insipidus is a common complication with transsphenoidal surgery, which is usually temporarily but need adequate hydration and close monitoring.

Conclusion: When hyperprolactinemia is confirmed, a cause for the disorder needs to be sought. This involves a careful history and examination, followed by laboratory tests and diagnostic imaging of the sella turcica. The goals of treatment are to normalize prolactin levels, restore gonadal function, and reduce the effects of chronic hyperprolactinemia. Dopamine agonists are the treatment of choice for the majority of patients. Transsphenoidal surgery is usually reserved for patients who are intolerant of medical treatment or acute complications such as pituitary apoplexy.