

When the Sella is Empty: Navigating Empty Sella Syndrome

Ghosh DK¹

¹Debasish Kumar Ghosh, Assistant Professor & Head, Department of Endocrinology, Khulna Medical College, Khulna, Bangladesh

Abstract

Empty sella syndrome (ESS) is a condition characterized by the herniation of the subarachnoid space into the sella turcica, resulting in a partially or completely empty sella on imaging. It is often discovered incidentally during brain imaging for unrelated symptoms. ESS is classified as primary, occurring without prior pituitary surgery or radiation, or secondary, following such interventions. Primary ESS is associated with congenital defects or increased intracranial pressure, while secondary ESS results from pituitary gland atrophy or iatrogenic causes. Symptoms, if present, include headache, hormonal imbalances (e.g. hypopituitarism), and rarely, visual disturbances due to optic chiasma compression. Diagnosis relies on magnetic resonance imaging (MRI) or computed tomography (CT), revealing a flattened or absent pituitary gland. Management is typically conservative for asymptomatic cases, focusing on monitoring and addressing hormonal deficiencies with replacement therapy. Symptomatic cases may require surgical intervention to relieve pressure or correct cerebrospinal fluid leaks. The prognosis is generally favourable, with most patients experiencing minimal complications. Understanding ESS is crucial for distinguishing it from other pituitary disorders, ensuring appropriate management, and improving patient outcomes through targeted hormonal and symptomatic treatment. [*J Assoc Clin Endocrinol Diabetol Bangladesh*, 2025;4(Suppl 1): S11]

Keywords: Empty Sella Syndrome (ESS), Pituitary disorders, Neuroimaging diagnosis

Presenting and corresponding author: Dr. Debasish Kumar Ghosh, Assistant Professor & Head, Department of Endocrinology, Khulna Medical College, Khulna. Email: kmc.khulna@gmail.com