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Case Report on Rathke's Cleft Cysts

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Abstract:
Background: Rathke's Cleft Cysts (RCCs) are unusual epithelial cysts that form in the pituitarygland from the remnants of the Rathke pouch. A fraction of these lesions expand and cause hypopituitarism, which can lead to vision loss. Furthermore, some RCCs with a high intra-cystic protein content can be confused with cystic pituitary adenoma, making differential diagnosis difficult. RCCs and pituitary adenomas are currently impossible to distinguish.
Case scenario: We are presenting a 65-year-old female who came to the medicine unit with the chief complaints of headache on and off, Pain over the Cervical region, Vertigo (sometimes), Tingling sensation over the bilateral upper and lower limb, and diminished vision of the right eye for 1 year, Dizziness, reduced hearing since 2 to 3 years. She has a past medical history of cystic kidney disease. For that, she had undergone through Radical Nephrectomy 1 year ago. Blood investigation and radiological investigation (Magnetic Resonance Imaging) was done. The patient has undergone surgery namely Endoscopic excision of Rathke's cleft cyst under general anesthesia and after surgery, he was treated with antibiotics.
Conclusion: The most frequently incidentally found seller lesions are pituitary adenomas and Rathke's cleft cysts. During routine autopsies, they are found in 13–33% of normal pituitary glands and usually reside in the pars intermedia, which is located between the anterior and posterior pituitary lobes.

Keywords: Rathke's cleft cyst,Cervical region, Computed Tomography.

INTRODUCTION

Rathke's cleft cysts (RCCs) are benign seller and/or suprasellar lesions that developed from the remains of Rathke's pouch.(1) with the highest incidence between 30 and the age of 50.(2) Many different names have been used to describe RCCs, including pituitary cyst, mucoid epithelial cyst, intrasellar epithelial cyst, Rathke's pouch cyst, and colloid cyst of the pituitary.(3) RCCs are benign and generally asymptomatic. Headaches and vision issues such as decreased visual acuity and visual field defects are common symptoms of RCCs.(4) Symptomatic Pituitary Rathke's cleft cysts are uncommon, although the clinical signs are common because of the close closeness of the chiasm.(5)

CASE PRESENTATION:

We are presenting a 65-year-old female who came to the medicine unit with the chief complaints of headache on and off, Pain over the Cervical region, Vertigo (sometimes), Tingling sensation over the bilateral upper and lower limb, and diminished vision of the right eye for 1 year, Dizziness, reduced hearing since 2 to 3 years. She is a case of Rathke's cleft cyst.She has a past medical history of cystic kidney disease. For that, she had undergone through Radical Nephrectomy 1 year ago.

As narrated by a patient she was having headaches and pain inthe cervical regionfor 2 months which was on and off in nature for which she approached the general physician in her locality. The pain was reduced for some time but gradually increased after ceasing the intake of analgesics. On re-visit to the hospital with increased headache and cervical region pain, the physician referred him to a regional multispecialty hospital for further treatment.
On physical examination, the patient's look was dull due to pain, and vision was diminished along with the hearing loss.
On Blood, Investigation Hemoglobin was 13.4 gm%, and Total Red blood cell count was 4.32 million/cu.mm, Total white blood cell count was 9800cumm, Total platelets count was 3.28 Lacs / cu. Mm on KFT Urea was 27 mg /dl, Creatinine was 1.1 mg/dl, Sodium was found at 140 mmol/L, and Potassium was found at 5.7 mmol/L. Fundus examination was done in thatdiminished vision of the right eye was found.
On radiological investigation, the MRI reveals that there is well defined cystic lesion mildly expanding the seller and with suprasellar components however the lesion is not displacing the optic chiasm superiorly. The lesion is measuring 2×2×1.1cm and has homogenous fluid intenseness is found.
The patient has undergone surgery namely Endoscopic excision of Rathke's cleft cyst under general anesthesia. After that, no complications were found in the patient. Postoperatively she was treated with theInj. Ceftriaxone 1g IV BD, Inj. Hydrocortisone 100 mg BD, Injection Neomol 100 mg Iv Tds, Inj pantop 40mg BD, Optineuron 10 mg OD, Injection pause 500 Mg iv.

DISCUSSION:

The incidence of this lesion is unknown because symptomatic Rathke's cleft cysts are uncommon. Rathke's cleft cysts have been reported in patients of all ages, but they are more prevalent in adults, with a peak incidence at 30–50 years of age and mean ages ranging from 34–44 years.(2) The lesions are more frequently detected incidentally or preoperatively now that CT and MR imaging are available. Whereas CT and MR imaging findings may be useful for separating these lesions from other intrasellar/suprasellar illnesses, radiologic findings might be nonspecific and necessitate cyst wall biopsy to make a more conclusive diagnosis.(6-17)
Asymptomatic RCCs have a slower growth pattern in their natural history, which suggests that smaller asymptomatic RCCs can be observed with serial magnetic resonance imaging. Symptomatic RCCs can be surgically removed with minimal morbidity, typically through an endonasal transsphenoidal corridor with the aid of an endoscope or a microscope. The symptomatic alleviation of headaches, visual abnormalities, and occasionally even endocrine dysfunction is frequently achieved with surgical treatment.(18-29)
Patients who experience acute pressure symptoms for the first time or worsening symptoms, particularly if the visual apparatus is compressed, should consider surgery. Rapid decompression of the seller and optic chiasm to maintain pituitary function and vision, as well as the identification of any potential pituitary tumors or RCC, are the objectives of the surgery.(8)Following surgical excision, RCCs frequently return. Estimates of 10-40 percent recurrence up to 5 years following surgery have been recorded, but because there is little consistency in the literature regarding size and follow-up period, there is a broad range.(30-34)

CONCLUSION:

The most frequently incidentally found seller lesions are pituitary adenomas and Rathke's cleft cysts. During routine autopsies, they are found in 13–33% of normal pituitary glands and usually reside in the pars intermedia, which is located between the anterior and posterior pituitary lobes. Asymptomatic little cysts are only accidentally discovered. Chronic clinical signs, principally headache, visual disturbance, and pituitary dysfunction, result when they are large enough to exert pressure on nearby structures.

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