Unusual presentation of more common disease/injury

Dermoid cyst in brain

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Summary

The authors are presenting here a case of dermoid cyst in 50-year-male who presented with 3 months history of headache.

BACKGROUND

Intracranial dermoid cysts are extremely rare lesions which comprises 0.04%–0.25% of all intracranial tumours.¹

CASE PRESENTATION

A 50-year-male presented with history of headache of 3 months duration for which patient took analgesics on and off but there was no symptomatic relief. The character of headache was dull aching, intermittent and bilateral. Headache was not associated with photophobia, nausea, phonophobia. General and neurological examinations were unremarkable. Funduscopy revealed no abnormality. CT scanning of head showed a hypodense lesion at cerebellopontine angle obstructing the drainage of cerebrospinal fluid. A radiological diagnosis of space occupying lesion

favouring dermoid cyst was made. Surgical removal of cyst was done. Microscopic examination revealed stratified squamous epithelium with underlying keratinous material (figure 1) containing hair structures (figure 2A,B).

OUTCOME AND FOLLOW-UP

After surgery patient recovered well and discharged in good conditions. Headache completely resolved after surgery.

DISCUSSION

Dermoid cysts are rare intracranial space occupying lesions. Cyst formation is due to implantation of tissue during neural tube closure in third to fourth weeks of embryonic life. They may be seen in midline and in posterior fossa or rarely at the region of third ventricle.^{2 3} They are benign,

Figure 1 Section showing stratified squamous epithelium with underlying keratinous material and brain tissue.

Figure 2 (A,B) Section showing hair structures.

slow growing tumours which contain lipid material⁴ The increase in size is due to collection of desquamation products and sebaceous secretions inside a cystic cavity.⁵ The clinical features depend upon the location of cyst as it behaves like space occupying lesions. The most common symptom is headache followed by seizures and cerebral ischaemia with sensory or motor dysfunction.⁶ It is usually seen in first and second decade of life. CT scan may reveal mixed densities.⁷ Fatty tissue appears hypodense whereas calcification in wall if present appears hyperdense. Presence of adnexal structures like sweat glands, sebaceous glands and hair follicles differentiates it from epidermoid cysts. Definitive treatment is surgical removal.⁸ Incomplete removal may results in recurrence. Rarely the cyst may rupture.⁷

Learning points

- ▶ majority of dermoid cysts are developmental in origin.
- ▶ rarely the dermoid cyst can rupture.
- ▶ seizures may develop after surgical removal which may be due to surgical removal.⁹

Competing interests None.

Patient consent Obtained.

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Alam K, Varshney M, Aziz M, Maheshwari V, Haider N, Gaur K, Srivastava VK. Dermoid cyst in brain. *BMJ Case Reports* 2011;10.1136/bcr.05.2011.4203, date of publication

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