Cerebro-Spinal Fluid Rhinorrhea in Empty Sella

Case Report*

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Summary

Non-traumatic primary cerebro-spinal fluid rhinorrhea appeared in a woman aged 48 years, without any evidence of an increase in intracranial pressure. The c.s.f. leak was associated with an empty sella, which was demonstrated by pneumoencephalogram and confirmed at operation. The surgical microscope was useful. Packing of the sella cavity with muscle was effective and prevented further leak of cerebro-spinal fluid.

A total of 14 cases of cerebro-spinal fluid rhinorrhea in empty sella have been reported. Different aspects of this condition are discussed.

The subject of the so-called empty sella possesses various clinical and surgical aspects which have been presented in recent years in various publications. One of us has recently published a review of the syndromes related to and associated with the empty sella (Obrador 1972).

Since that paper was written others have appeared dealing with general and radiological aspects (Zozulia et al. 1971), Overbeek et al. (1971), Bernasconi et al (1972), with intrasellar arachnoid cysts (Guiot et al. 1971) and with the downward traction on the optic nerves into the empty sella after the removal and radiation of a pituitary chromophobe adenoma (Welch and Stears 1971). General information and the literature on the subject may be found in all these papers. But, we have

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to add an earlier paper of Asenjo et al. (1955) which mentioned three cases of pituitary adenomata treated by radiotherapy (one together with operation) presenting a late onset of visual deficit leading to an exploratory operation that only demonstrated an empty sella.

We have also seen further cases of empty sella and have especially studied those women with "primary empty sella headaches" (Obrador 1971). In two pituitary patients with optic nerve involvement after radiation treatment, the sella was filled with small silicone balls to prevent the downward drag of the optic nerves and chiasm.

However, the purpose of this article is to report another case of cerebro-spinal fluid rhinorrhea (c.s.f.r.) in a patient with an empty sella. The first cases were reported by Ommaya et al. in 1968.

The summary of our observations is as follows:

A 48 year old woman, was admitted to our Neurosurgical Service (Ciudad Sanitaria La Paz), complaining of the continuous escape of clear and salty fluid through the left nostril. This fluid leak lasted for one year without stopping and increased when the patient lowered her head.

The previous history was irrelevant and without any significant head trauma. She had four normal pregnancies and the menopause occurred two years previously.