Reviewer's report

Title: Isolated pineal region metastasis from lung adenocarcinoma with obstructive hydrocephalus: a case report

Version: 1 Date: 11 January 2013

Reviewer: Vijay Hadda

Comments to authors:

Has the case been reported coherently? Yes
Is the case report authentic? Yes
Is the case report ethical? Yes
Is there any missing information that you think must be added before publication? No
Is this case worth reporting? Yes
Is the case report persuasive? Yes
Does the case report have explanatory value? No
Does the case report have diagnostic value? No
Will the case report make a difference to clinical practice? No
Is the anonymity of the patient protected? Yes

Comments to authors:

Dear authors,

This is really an interesting case. As you have already mentioned it is rare to find carcinoma lung with isolated metastasis to pineal gland. I have few suggestions (which are more of grammatical/language rather scientific) to make this manuscript more reader friendly.

Introduction

“Our present patient had adenocarcinoma, which seems to be a rare histological type associated with pineal metastasis.” May be written as “Our patient had adenocarcinoma, which seems to be a rare histological type associated with pineal metastasis.”

“Most cases of pineal metastases are asymptomatic, and are diagnosed by autopsy [2, 3].” May be written as “Most cases of pineal metastases are asymptomatic, and are diagnosed during autopsy [2, 3].”

Case presentation

The usual features of the pineal tumours are related to visual field, Hypo-pituitarism (Diabetes Insipidus, Hypothyroidism etc). Authors should mentioned that whether this patient had these.
Authors have also mentioned levels of CEA values which were elevated. Authors should discuss the usefulness of this test in such setting.

Did patient received corticosteroids during pre-operative?

Discussion:

“The mechanism underlying the development of pineal metastasis is only partially understood; Ortega et al. suggested hematogenous spread to the pineal body through the posterior chroidal arteries [7]. According to Toner et al. [8], the pineal gland is excluded from the blood-brain barrier, and is thus a more vulnerable site for hematogenous metastasis from distant tumors.” May be rephrased “The mechanism underlying the development of pineal metastasis is partially understood. Ortega et al. suggested hematogenous spread to the pineal body through the posterior chroidal arteries [7]. Since the pineal gland is excluded from the blood-brain barrier, it is more vulnerable site for hematogenous metastasis from distant tumors [8].”

“In this context, Kashiwagi et al. described that one of the contributory factors was the special histological characteristics of the pineal body, namely, the numerous sinusoidal vessels with no perivascular glial sheets which increases the vascular permeability [3].” This statement may also be put together with suggested mechanisms/risk factors causing isolated pineal metastases.

While discussing the role of serum tumour markers, authors should also mentioned other tumour markers such as beta-hCG, lactate dehydrogenase (LDH) and placental alkaline phosphatase for differentiation of primary vs metastatic pineal tumour.

Hanada et al. reviewed 33 cases of metastatic pineal tumors diagnosed in life, and 6 patients underwent neuroendoscopic third ventriculostomy for hydrocephalus, which resulted in good control in all cases [13]. The message of the statement is not clear, please rephrase it.