Infundibular buckling as an adjunctive sign of Pituitary adenoma

Sir,

Pituitary adenomas comprise up to 25% of central nervous system tumors.[1] Magnetic resonance imaging (MRI) usually makes an accurate diagnosis with the finest possible details. Infundibular displacement is a well-known sign following the development of computerized tomography (CT), however, we are unaware of any description of infundibular buckling. Recently, we encountered a 39-year old male, who presented with the clinical picture of acromegaly and a high proclactin level. Growth hormone and somatomedin levels are high. The brain MRI shows a macroadenoma with buckle infundibulum on coronal images **(Figure 1)**. Postoperative MRI shows the surgical changes and the return of the infundibulum to its normal slender configuration **(Figure 2)**. Infundibular displacement to the contralateral or the ipsilateral side of the adenoma is a well-known radiographic sign on both CT scan and MRI. These signs are helpful in diagnosing microadenomas in conjunction with other signs such as focal hypodensity and asymmetrical sella floor.[2] However,

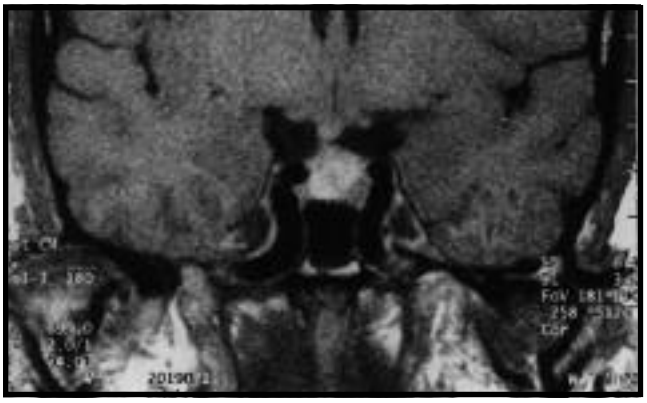

Figure 1 - Coronal T1 weighted magnetic resonance image with gadolinium showing the enhancing adenoma and the buckled infundibulum.

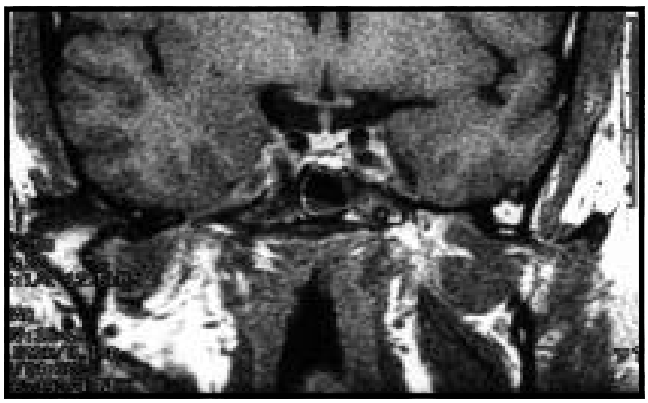

Figure 2 - Coronal T1 weighted magnetic resonance image showing a normal looking infundibulum postoperatively.

in most macroadenomas the infundibulum is thick and cannot be differentiated from the adenoma. In our case, the size of the adenoma was slightly bigger than 10mm, which allows differentiating it from the infundibulum. We think that the buckling sign can be a helpful adjunctive sign of pituitary masses. The return of the infundibulum to its normal shape makes the possibility of neoplastic involvement less likely. We conclude that buckling of the pituitary infundibulum can be a helpful adjunctive sign in the diagnosis of pituitary masses.

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