CT AND MRI OF SELLAR AND PARASELLAR LESIONS

Essay

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Master Degree of **Radiodiagnosis**

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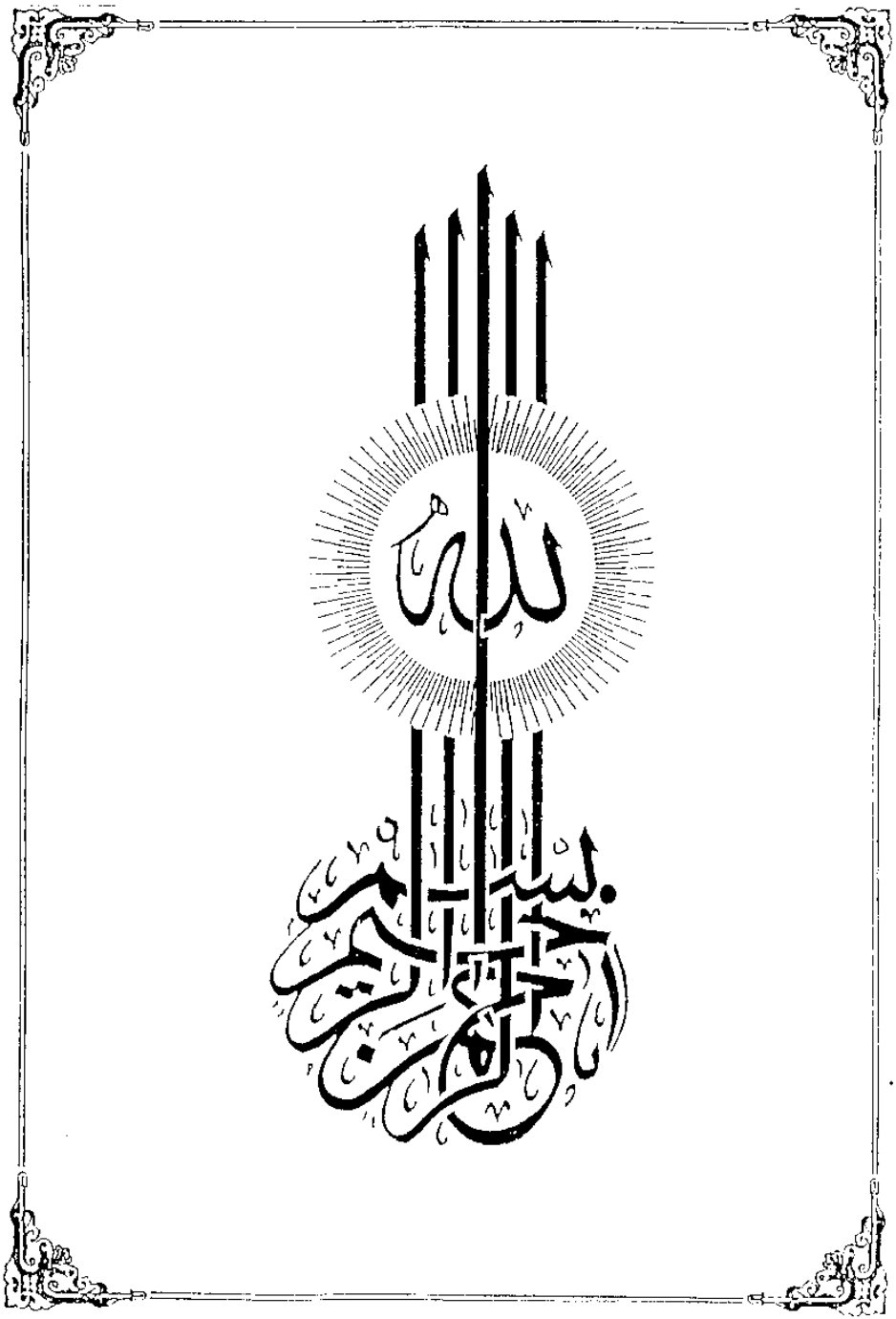
بسم الله الرحمن الرحيم

سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا

إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

سورة البقرة ٠٠ آية ٣٢



TO...

MY FAMILY

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Marwa Ibrahim

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The sellar and parasellar region is a complex crossroad of endocrine, neural, vascular and skeletal structures. Many clinical syndromes are the result of lesions involving the sella turcica and neighbouring structures. Imaging is crucial because clinical evaluation frequently cannot localize the lesion accurately.

The aim of this work is to summarize the most commonly encountered sellar and parasellar lesions and to enlight the role of CT and MRI in diagnosis of these lesions. The technique, advantages and limitations of either modality will be discussed and evaluated.

ANATOMY

Gray in 1975 stated that the sella turcica is a superior saddle shaped formation on the intracranial aspect of the body of sphenoid bone.

Parts of the Sella Turcica :

The parts of the sella are recognized as tuberculum sellae, dorsum sellae, hypophyseal fossa, the anterior, middle and posterior clinoid processes.

1. Tuberculum Sellae :

It is an elevation in the anterior slope of the sella turcica. Just anterior to the tuberculum sellae lies a groove for the optic chiasm termed sulcus chiasmaticus, with the optic foramen lateral to it.

2. Dorsum Sellae :

It is a square plate of bone that projects upward and forward. The middle part of the dorsum sellae is thin while the lateral edges are thick.

3. Hypophyseal Fossa :

It is a hollowed-out fossa posterior to the tuberculum sellae, with the sphenoid sinus inferior to it. The floor of the fossa may be flat, concave or convex from side to side.