

INTRODUCTION AND AIM OF THE WORK

Cystic brain lesions can be defined as unnatural cavities within the brain, in which continuity of the brain parenchyma is disrupted and replaced by fluid (*Barkovich, et al., 1989*).

Many radiological diagnostic modalities are available to demonstrate the number, size, shape and fluid nature as well as wall thickness of cystic brain lesions, by far, CT is the first modality of choice in the diagnosis, but other modalities could be sharing in assessment of cystic brain lesions like MRI whenever it is indicated (*Voelker, et al., 1991*).

Cerebral cystic lesions had been classified previously by clinical evolution as benign cystic lesions, as opposed to malignant cerebral cysts. Benign category includes cerebral cysts like arachnoid cysts which contain clear fluid resembling CSF, hardly increase in size and generally have no threat to the patient life. Malignant brain cysts, by contrast, are usually filled with a yellow proteinaceous fluid, and are associated with brain tumors. However this traditional classification should be considered inadequate (*Go, et al., 1993*).

So it is important to find a classification for cystic brain lesions based upon pathological bases and pathogenesis that will allow the understanding of its different characteristics in

different imaging modalities, depiction and findings of CT, MRI
(Go et al., 1993).

So, cystic brain lesions could be classified as :-

1) Cysts containing CSF like fluid :-

1A : Ex vacuo type cysts :

- * Leptomeningeal cyst.
- * Cysts after surgical resection.
- * Cysts resulting from infarctions.
- * Porencephalic cysts.

1B : Cysts with fluid secreting walls and CSF like contents

- * Arachnoid cysts.
- * Neuroepithelial cysts.

1C : Cysts associated with dysgenesis :

- * Dandy-walker cysts.
- * Inter hemispheric cysts.

2) Cysts with a lining of non-neural epithelium :

- * Colloid cysts.
- * Cysts associated with craniopharyngiomas.
- * Epidermoid cysts.
- * Dermoid cysts.

3) Cysts associated with gliomas and other tumors :

- * Cysts associated with gliomas, meningiomas.
- * Metastasis and haemangioblastomas.

4) Cysts of infectious origin :

- * Brain abscess.
- * Hydatid cysts.

(Go, et al., 1993).

AIM OF THE WORK :

The aim of this study is to demonstrate and verify the role of CT in the diagnosis of various types of cystic brain lesions, to review the literature of the subject and try to adopt a diagnostic protocol for diagnosis of these lesions.