

The Role of Dynamic CT in the Diagnosis of Hepatic Tumors

Thesis

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By

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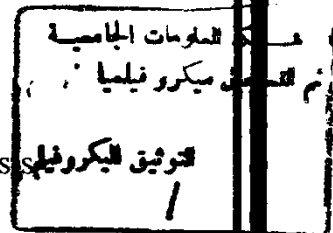
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*DEDICATED TO MY
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ABSTRACT

A dynamic CT study in which an IV bolus injection of an average dose of 45 g iodine was injected manually, followed by dynamic fast scanning. The study was conducted on 66 patients with suspected hepatic tumors; 19 women; 47 men, their ages ranged between 13-70 years. 29 cases had benign lesions while 37 cases had malignant lesions. Certain criteria of enhancement patterns of hepatic tumors were used in their characterization in general, and differentiating malignant entities from the most benign hepatic neoplasm, cavernous hemangioma in particular.

INTRODUCTION
AND
AIM OF WORK

INTRODUCTION AND AIM OF WORK

In many cases, hepatic tumors do not provide sufficient intrinsic contrast to be detected with nonenhanced CT studies. A contrast enhanced technique has been developed for hepatic CT, that exploits differences in vascularity and in interstitial diffusion of contrast material between normal hepatic parenchyma and hepatic tumors.

During the past decade, we have experimented with faster computed tomographic (CT) scanning techniques and new methods of administration of contrast material to improve our diagnostic ability.

Different hepatic tumors can be differentiated accurately by bolus dynamic scanning if standard CT techniques, methods of contrast medium administration and strict morphologic criteria are used for evaluation and diagnosis.

For most focal liver lesions which are hypovascular in relation to normal hepatic parenchyma, bolus contrast material enhancement and dynamic scanning improve lesion detectability.

The aim of this work is to emphasize the role of dynamic CT study in the detection and evaluation of hepatic tumors.

***REVIEW
OF
LITERATURE***

HISTORICAL REVIEW