سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

سامية محمد مصطفى

شبكة المعلومات الجامعية

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التوثيق الالكتروني والميكروفيلم

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سامية محمد مصطفى

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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بالرسالة صفحات لم ترد بالأصل

Cytodiagnostic Studies Of Malignant Tumors

THESIS

Submitted In Partial Fulfillment
For The Degree of M.D. Pathology

By

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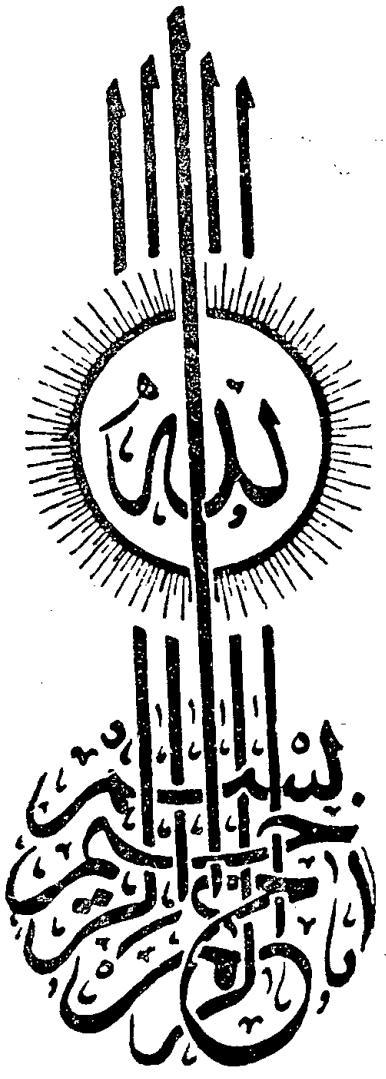

اقرأ باسم ربك الذى خلق .. خلق الإنسان من علق
اقـرأ وربك الأكرم .. الذى عـلم بالقـلم
علم الإنسان مالم يعـلم .

صدق الله العظيم

To My Family

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INTRODUCTION
AND AIM OF THE WORK

In diagnostic cytology, the recognition of malignancy is based on general criteria which may apply to a great variety of cells. The distinctive type of malignant cells can be determined by specific criteria.

Nucleolar organizer regions, Scanning Electron Microscopy (S.E.M) and cytochemical studies may be of help in recognizing the exact nature of malignant cells; which is very important in the selection of the line of treatment.

In addition the achievement of sonography increases the significance of diagnostic cytology by obtaining aspirated material and needle biopsies from deep seated organs and also becomes very helpful to patients with inoperable cancer (Ferrucci et al., 1990).

The search for a proliferative index or clue to enable pathologist to discriminate between non-neoplastic proliferative conditions and malignant lesions is causing much concern. NORs count has attracted the attention of pathologist because it provides both simplicity and even reliability in some laboratories. Some are evaluating this techique from the prognostic point of view (Underwood & Giri, 1988). In order to achieve good reliable and consistent data each centre must set its own parameters concerning the fixation, processing technique, staining procedure for silver incubation and should try its own experimental work for such a procedure (Ploton et al., 1986).

The special advantages of SEM as compared to light microscopy (L.M.) are superior cell preservation, increased magnification and greater resolution. It reveals the details of the surface structure of cancer cells and inter-relationship of the various cell types. Scanning electron microscopic data may aid in the early cytologic diagnosis of malignant effusion. However, its use alone can not

identify the histologic nature of the pathological lesions examined. Thus light microscopic examination is necessary before SEM study (Bewtra & Greer, 1985).

This work aimed at:

1- Cytologic examination of cancer cells suspended in effusions and fine needle aspirates (FNA) and point out the diagnostic usefulness of different stains; haematoxylin and eosin (H&E), Papanicolaou (PAP) and periodic acid schiff (PAS) with and without diastase.

2- Assessment of silver-staining nucleolar organizer regions count (Ag-NORs) as a differentiating parameter between neoplastic and non neoplastic cells.

3- Scanning electron microscopic study of surfaces of cancer cells suspended in pleural and peritoneal effusions.