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شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

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بالرسالة صفحات
لم ترد بالأصل

Bcl-2 IN BREAST CANCER PATIENTS

THESIS

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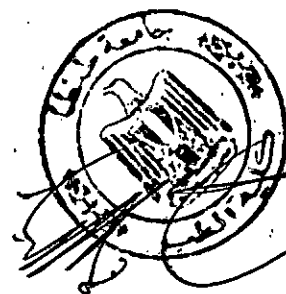
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سبحانك لا علم لنا إلا ما علمتنا

إنك أنت العليم الحكيم

صدق الله العظيم

(البقرة ٣٢)

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*Introduction
and Aim of
the Work*

INTRODUCTION AND AIM OF THE WORK

Tumorigenesis is thought to result from a series of progressive gene alteration including activation of oncogene and inactivation of tumor suppressor genes (Kalliopi et al, 1996) one category of genes that appear to be important in tumor progression are those involved in the regulation of programmed cell death (Apoptosis).

One of these, the Bcl-2 gene encodes for a protein that appears to block apoptosis in a number of physiologic and pathologic context (Baer et al, 1994). This gene is located on chromosome 18 and was first identified upon analysis of the (14; 18) chromosomal translocation found in most patients with follicular B- cell lymphoma (Stewart et al, 1994)

In fact, expression of the Bcl-2 protein has been identified in a variety of developing and adult human tissues especially in the epithelial cells of glandular tissues such as breast, thyroid and prostate (Mc-Donnell et al 1992, Doglioni et al 1994, Viole et al 1995).

In particular, Bcl-2 protein expression has been observed in 58-80% of invasive breast cancers and is associated with a number of favorable features, such as high histologic grade of differentiation, low proliferation rate and estrogen and progesterone receptors positivity (Leek et al, 1994).

The present study aims to study the level of Bcl-2 in breast cancer patients using specific ELISA technique to find out if it could provide insight into its role in tumorigenesis and the role of apoptosis in the progression of breast cancer.

*Review of
Literature*

BREAST CANCER

Breast cancer is the commonest form of cancer in women throughout the world .It constitutes about 28% of all cancers in women through out the world (Richard et al, 1996)

- **High risk factors in breast cancer:**

The causes of breast cancer is not known, but there are a number of well known factors related to breast cancer risk.

(1) Race

Breast cancer is more in Western Europe and North Africa than in Japan and other Asian and African populations (Miller et al , 1987).

(2) Sex incidence

Breast cancer is 100 times more common in women than in men (Boutros et al , 1982).

(3) Age

Risk of breast cancer increases progressively with age . The incidence rises steeply to age 50, then becoming flat for five years , then increases again but at a mush slower rate. (Michael et al , 1994)

(4) Age at menarche and at menopause

The risk for women who approach puberty before the age of 12

years is almost double that who menstruate after the age of 16 years , and women who have delayed menopause are at higher risk than those with earlier menopause (Miller et al , 1987)

(5) Family history .

Family history of breast cancer and exposure to exogenous hormones may act as risk factor (Kelsy and Gammon , 1991) .

(6) Pregnancy .

Harris et al , (1992) , reported an association between multiparity and decrease risk of developing breast cancer

(7) Socioeconomic status

Breast cancer is more common among women in upper socioeconomic class than among those in lower socioeconomic classes. (Kelsey et al , 1991).

(8) Radiation

Breast cancer increase in women who expose to radiation as a result of medical diagnosis , treatment or occupation (Boice et al , 1995).

(9) Alcohol

Breast cancer increase among women drinking alcohol compared with non drinkers (Russo et al , 1990).

(10) Obesity

Direct relationship between body weight and risk of cancer breast has been reported and this was attributed to synthesis of oestrogen in fat depots (Harris et al, 1992).

(11) Benign breast disease

Most studies show a marginal increase in the risk of breast cancer among women with benign breast disease as Fibrocystic changes with atypical epithelial hyperplasia (Kelsey et al, 1991).

(12) Smoking

Breast cancer is more common among smoker women compared with non smokers (Kelsy et al, 1991).

*** Benign tumors of the breast (Elston et al, 1982).**

(1) Epithelial

- Pure papilloma
- Pure adenoma

(2) Connective tissue

- Neurofibroma
- Lipoma

(3) Mixed

- Fibroadenoma
- Papillary cystadenoma