







شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

### جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

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بعض الوثائسق الاصلية تالفة

# بالرسالة صفحات لم ترد بالاصل

### EVALUATION OF PROGNOSTIC FACTORS ON TREATMENT RESULTS OF SOFT TISSUES SARCOMAS EXCLUDING RHABDOMYOSARCOMA

#### THESIS

Submitted for the Partial Fulfillment of Master Degree

Radiotherapy

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1999

#### ACKNOLEDGEMENT

First of all and above all, great thanks to ALLAH

I would like to express my deepest regards, gratitude and appreciation to **Prof.Fawzy Zaki Sherif** Assist. Prof. of Radiotherapy, Faculty of Medicine, Tanta University for his generous, kind help and his continuos valuable supervision. I am very grateful to him for devoting a great of his precious time for supervising my work. I shall always remember his marvelous support, encouragement and guidance to me.

I would like to express my gratitude to **Prof. Azza El-Said** Assist.

Prof. of Clinical Oncology, Faculty of Medicine, Mansoura University for her sincere advice and generous assistance.

I am more than grateful to **Dr. Hala Fouad El – Shazly** Lecturer of Radiotherapy, Faculty of Medicine, Tanta University for her meticulous supervision, kind help, patience and generous assistance to complete this work and make it valuable.

Finally, I owe much to every one who helped me during this work...



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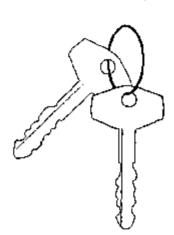
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### Aim Of The Work

#### AIM OF THE WORK

The aim of this work is evaluation of different prognostic factors on treatment results of soft tissue sarcomas.



## Introduction

#### INTRODUCTION

Soft tissue sarcomas (STS) are malignancies that arise from the connective tissues of the body <sup>(1)</sup>. Soft tissue sarcomas are rare solid tumors that account for less than 1% of the annual new diagnosis in adults in USA <sup>(2)</sup>. The disease encompasses more than 20 histologically and biologically distinct sarcoma subtype <sup>(3)</sup>.

#### ANATOMICAL SITES:

Although soft tissue sarcomas can occur in any site, the majority occurs within the muscle groups of the extremities. They occur also in retroperitoneal region <sup>(1)</sup>.

#### EPIDEMIOLOGY AND RISK FACTORS:

Approximately 6400 cases of soft tissue sarcomas occur each year, resulting in 3700 deaths in U S A <sup>(4)</sup>. Their incidence accounts for about 1% of adult malignancies and 15% of malignancies in children and adolescents in USA <sup>(5)</sup>.

#### Age:

Soft tissues sarcomas occur more common in elder people with 40% in persons > 55 years <sup>(6)</sup>. The mean age in 1993 was 55.8 years in USA <sup>(2)</sup>. Not only the incidence varies in relation to the age but also the type of STS e.g. rhabdomyosarcoma is considered one of the common tumors

during the first two decades of life whereas malignant fibrous histocytoma is predominantly a tumor of old age <sup>(6)</sup>.

#### Sex:

Males were diagnosed with soft tissue sarcomas more than females with male to female ratio being 1.4:1<sup>(3)</sup>. For example liposarcoma shows male to female ratio of 11:9, angiosarcoma shows ratio of 61:39, hemangiopericytoma shows ratio of 1:1 and malignant fibrous histocytoma shows ratio of 29: 21<sup>(7)</sup>.

#### Histopathologic types:

Fibrosarcoma, malignant fibrous histocytoma and liposarcoma are now the most common pathological types of STS <sup>(6)</sup>.

#### **PATHOGENESIS**

The pathogenesis of soft tissues sarcomas is actually unknown as other malignancies <sup>(6)</sup> but various factors are suspected to play a role in their pathogenesis as:

#### TRAUMA:

Examples of soft tissues sarcomas have been reported arising in scar tissues following surgical procedures, thermal or acid burns and fracture sites (7).

#### **ENVIRONMENTAL CARCINOGENS:**

Asbestos and hydrated silicates: These are the most important known carcinogens, being responsible for most of the cases of mesothelioma. Their carcinogenicity depends upon various factors mainly intensity, duration of asbestos exposure as well as type of asbestos and the submicroscopic fiber diameter, e.g. blue asbestos is considered to be more carcinogenic than white asbestos. In most cases of mesothelioma were improved that asbestos and hydrated silicates were the cause<sup>(7)</sup>.

Dioxin: Soft tissue sarcomas increase six folds in incidence in forest and agricultural workers who have been exposed to dioxin containing herbicide <sup>(8)</sup>. Also it was reported that the reason of high incidence of STS in American soldiers who shared in Vietnam war was the exposure to agent orange that contained dioxin as a contaminant <sup>(9)</sup>.