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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



شبكة المعلومات الجامعية

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التوثيق الالكتروني والميكرو فيلم

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Post Operative Radiotherapy In Bladder Cancer

Thesis

Submitted in partial fulfillment of M.Sc. degree in
Radiation Oncology.

By

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CONTENTS

	page
Introduction and aim of work -----	1
Review of literature -----	4
Epidemiology -----	4
Pathogenesis of developingof carcinoma in bilharzial bladder -----	9
Pathology -----	14
Staging -----	22
Grading -----	26
Treatment27 -----	
Prognostic factors affecting survival after radical cystectomy -----	31
Pattern of treatment failure after cystectomy -----	37
Anatomical distribution of distant metastasis -----	40
Radiotherapy in bladder -----	42
Material & methods -----	49
Results -----	51
Discussion -----	66
Summary -----	76
References -----	78
Arabic summary -----	89

TABLES

	page
Table (1) : tumour stage and survival, 1026 cystectomy series	32
Table (2) : tumour grade and survival, 1026 cystectomy series	33
Table (3) :Lymph node status and survival, 1026 cystectomy series	35
Table (4) :Influence of post operative RT on actuarial 5-year disease free survival	44
Table (5):The actuarial 5-year survival rate for different stages in 78 patients with bladder cancer treated with pre and post operative adjuvant radiation therapy.	45
Table (6): Age distribution of 89 patients with operable bladder cancer.	51
Table (7) :Pathological subtypes of 89 patients with operable bladder cancer.	52
Table (8) :pathological stage of 89 patients with operable bladder cancer.	53
Table (9) :distribution of 89 patients with operable bladder cancer by Lymph node status.	54

Table (10): Dose of post operative radiotherapy received by 89 patients with operable bladder cancer.	54
Table (11): illustrate different overall period.	55
Table (12): disease free; relapsed patient.	56
Table (13): local : systemic relapse.	57
Table (14): type of distant metastasis.	58
Table(15): incidence of nodal involvement in patients with bilharzial bladder cancer (Egyptian series).	70

FIGURES

	page
Fig (1) : pathogenesis of developing of carcinoma in bilharzial bladder.	10
Fig (2) : illustration of different overall period.	55
Fig (3) : disease free: relapsed patients.	56
Fig (4) : type of distant metastasis.	58
Fig (5) : disease free survival for 89 patients with bladder cancer.	59
Fig (6) : disease free survival according to pathological stage in 89 patients with bladder cancer.	60
Fig (7) : disease free survival for different lymph node status in 89 patients with bladder cancer.	61
Fig (8) : local control rate for 89 patients with bladder cancer.	62
Fig (9) : distant metastasis disease free survival for 89 patients with bladder cancer.	63
Fig (10): disease free survival for P3 pathological stage.	64
Fig (11) : disease free survival for different overall period in delivery of post operative radiotherapy.	65

Post- operative Radiotherapy in Bladder Cancer

Introduction

Bladder Cancer constitutes 4% of all cancer in United State, and represent 30% of all cancer cases treated at Egyptian National Cancer Institute (Shreif & Ibraheim, 1987). Cairo University reported a lower frequency of 10% (El bolkainy, 1998)

The relative frequency of histological subtypes of bladder carcinoma depends on the clinical setting. About 90% of bladder carcinoma reported from the West are transitional cell type, (Scher et al., 1997) . In large series reported from Egypt, sqamous cell carcinoma accounted for 59% - 73% of bilharzial bladder cases (El Bolkainy et al., 1981; Zaghloul et al., 1992; Ghoneim et al., 1997).

The predominance of sqamous cell cancer in Bilharzial series is probably related to sqamous metaplasia and dysplasia which are relatively common in chronic bilharzial cystitis that are frequently associated (65%) with this type of carcinoma (Khafagy et al., 1972).

Bladder carcinogenesis is probably related to bacterial and viral infection, commonly associated with Bilharzial infestation rather than the parasite itself (**El- Aasar and El Merzaani, 1981**).

✓ ✕✕ Radical cystectomy is the treatment of choice for carcinoma of bilharzial bladder (**El Sebai et al., 1961**). Local recurrence accounts for approximately 75% of the failures of this treatment (**El Said et al., 1979; Ghoneim et al., 1979**).

The patient with extra vesical tumor extension, or with lymph node positive disease, seem to be at increase risk for recurrence and may be considered for adjuvant treatment strategies (**Stein et al., 2001**).

✕✕ Post operative radiotherapy leads to a marked reduction in the incidence of local recurrence. This reduction was reflected on the disease free survival. In a large prospective randomized study, post operative radiotherapy could reduce local recurrence and improve the disease-free survival (**Zaghloul et al., 1992**). However, post operative radiotherapy did not affect the incidence of distant metastasis. The 5-year cumulative metastatic rate was estimated to be 23% which did not differ much with adjuvant radiotherapy (**Zaghloul., 1996**).

XX

Aim of the work

To assess the value of post operative radiotherapy in improving bladder cancer treatment results in terms of disease free survival of the patient.

EPIDEMIOLOGY

Bladder Cancer constitutes 4% of all cancer in United State, and represents 30% of all cancer cases treated at the Egyptian National Cancer Institute (**Shreif & Ibraheim, 1987**). Cairo University reported a lower frequency of 10% (**El bolkainy, 1998**). Other countries in the Middle East with a high frequency of bladder cancer include Iraq 10 % Gizan region in South of Saudia Arabia 6 % (**El bolkainy, 1998**).

Bladder Cancer is the fourth most common cancer in men and the seventh most common in women in USA. More than 54.000 cases (in 29.500 men and 14.900 women) were diagnosed in 1999, and 12.500 individuals (8400 male and 4100 female) succumbed (**Landis et al., 1999**).

The 65 years median age, and male to female ratio 3:1 reported in the West (**Boring et al., 1994**). In Egypt were not the case as the median age of 46 years, and male to female ratio of 5:1 were reported by **El Bolkainy; 1998** and a median age of 48 years and 3:1 male to female ratio were reported by **Zaghloul et al., 1992** .

About 90 % of bladder carcinoma reported from the West are transitional cell type (**Scher et al., 1997**). In large series reported from Egypt squamous cell carcinoma account for 59 % - 73 % of bladder

cancer (El Bolkainy et al., 1981; Zaghloul et al., 1992 ; Ghoneim et al., 1997).

Bladder Cancer death rates declined substantially for both whites and blacks of both genders from 1973 to 1996, approximately 24 % overall. (**Hankey et al., 1999**). This decrease is likely to be a result of more cases being diagnosed at a non-invasive stage and more effective therapies.

Cigarette smoking is the most important risk factor; also working in the dye, rubber or leather industries is also strongly associated with bladder cancer (**Silverman et al., 1989**).

The latency period from initial exposure to the development of an urothelial tumour is a median of 18 years.

Cigarette smoking is believed to contribute up to of 50 % of the cancer in men and 33 % of the cancer in women (**International Agency for Cancer Research 1987**) . Smokers have a two to four folds higher relative risk of bladder cancer than non-smokers. Smoking contributes to the field changes of the urothelium, because the urothelium from individuals who never smoke show atypia in only 4 % of cases versus up to 50 % in smokers (**International Agency for Cancer Research 1987**) . Discontinuing smoking decreases risk,