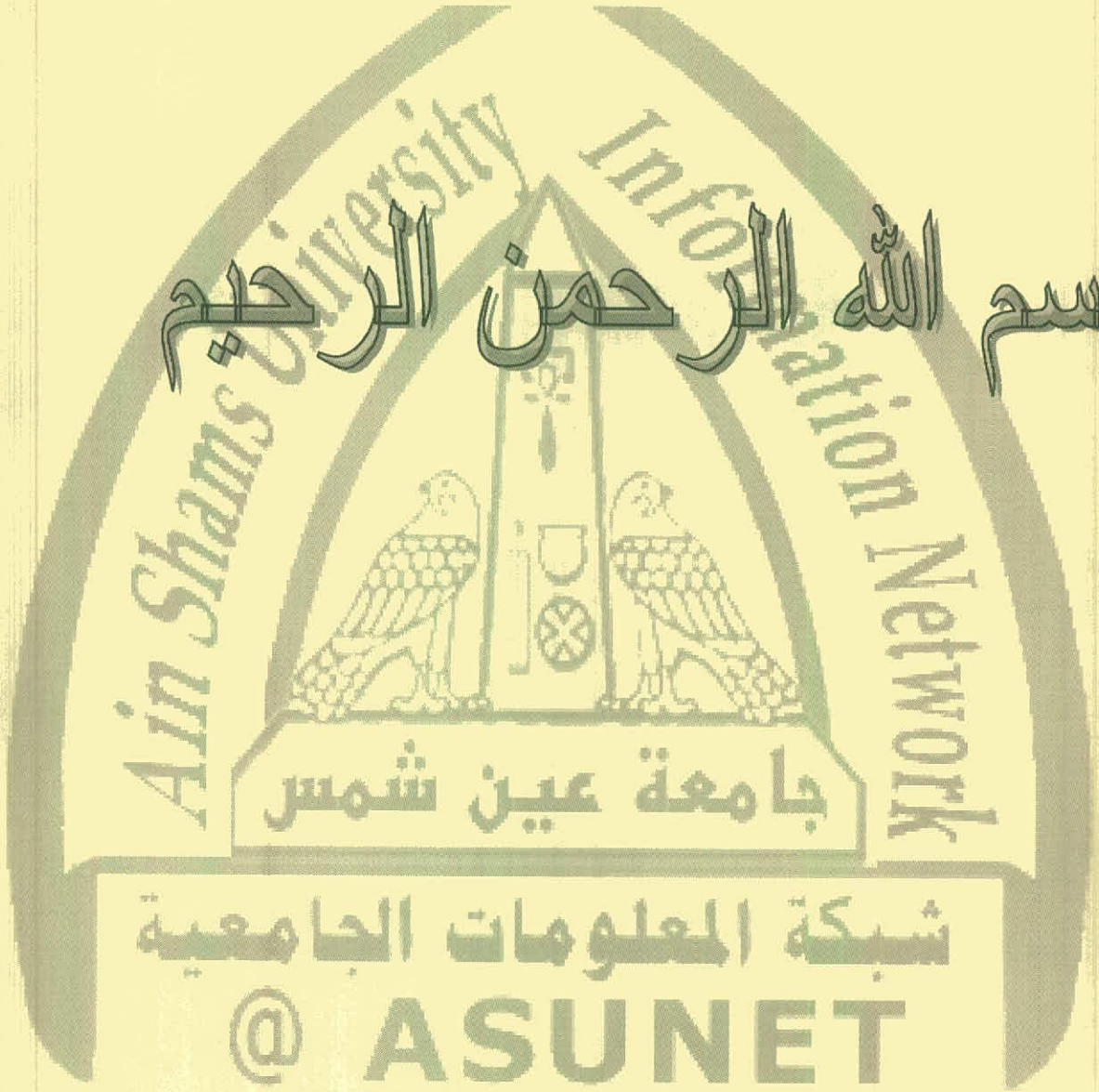
شبكة المعلومات الجامعية



بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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يجب أن

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To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائـــــــق الاصليـــــة تالفـــة

بالرسالة صفحات لم ترد بالاصل

THE USE OF ULTRASOUND-GUIDED TRANSPERINEAL IMPLANTATION OF I^{125} & Pd^{103} FOR THE TREATMENT OF EARLY STAGE PROSTATE CANCER

A thesis
In partial fulfillment of the Doctorate degree in Urology

Ali Mahmoud Ziada,
M.B.B.ch., M.Sc.Urology
Cairo University

Supervised by

E.David Crawford, M.D.
Professor of Urology
University of Colorado

Amr Mahmoud Abdel-Hakim, M.D.
Professor of Urology
Cairo University

Mohamed Youssef ElGammal, M.D.
Assistant Professor of Urology
Cairo University

Cairo University
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Abstract

THE USE OF ULTRASOUND-GUIDED TRANSPERINEAL IMPLANTATION OF I^{125} & Pd^{103} FOR THE TREATMENT OF EARLY STAGE PROSTATE CANCER

Ali Mahmoud Ziada*, Mohamed ElGammal*, Amr AbdelHakim*, E. David Crawford^.
*Cairo University and ^University of Colorado

Introduction

This study conducted between July, 1996 and June, 1999; 51 patients underwent TRUS guided prostate brachytherapy. The aim was to determine the efficacy of brachytherapy in cancer control as well as evaluate associated side effects.

Methods

The average age of patients at the time of the implant was 66 years (50-79 years). Patients' clinical stage were T1c (34 patients), T2a (13 patients) and T2b (4 patients) with a PSA ranging from 1.9 ng/ml to 19 ng/ml. The average size of the prostate gland prior to the implant in our study was 33.5 cc. The maximum volume was 49.9 cc. Eleven patients received combined androgen blockade and 9 patients received LHRH agonist only. 33 patients had ^{125}I implant versus 18 with ^{103}Pd implants based on Gleason sum above 7. Three patients in our study were treated with supplemental EBRT.

Patients were discharged on the same day with antibiotics, alpha-blockers, non-steroidal anti-inflammatory agents. Follow up included PSA, first at 6-8 weeks then at 3 month intervals for 2 years then bi-annualy thereafter. Chest x-rays were obtained in the immediate postoperative period to check for seed displacement. CT scanning & dosimetry were obtained to determine the adequate coverage and to assess the quality of the implant.

Results

Forty-one patients with an average PSA of 7.7 ng/ml were a success. These patients achieving a nadir PSA equal to or less than 1 ng/ml. 31 patients achieved a PSA nadir of less than 0.5 ng/ml. Four patients were considered borderline outcome because their PSA never achieved nadir below 1 ng/ml. Six patients were considered failures because their PSA started to rise after an initial drop.

All patients were continent except 2 patients had occasional dribbling. Weak stream was reported in 15 patients and 4 patients had retention postoperative. One patient required clean intermittent catheteriztion for 6 months before bladder function gradually recovered. Painful urination, reported by 3 patients, was mild and required no treatment. Mild urgency was reported in 11 patients. Nocturia reported in 12 patients was usually mild (1-2) except in 3 patients (4-5). Frequency was reported in 5 patients. All these symptoms resolved spontaneously.

Potency was adequate for intercourse in 38 patients, erections were inadequate for intercourse in 6 patients, 3 patients were impotent and 4 patients were not evaluated for potency. Rectal complications were mild and required medication in only one patient. Other complication included fever reported by one patient and 3 patients were found to have seed migration to the lungs. None of them developed any adverse events as a result.

Conclusion

Our results showed the technique is effective and comparable with other currently available methods of prostate cancer management. Side effects were both acceptable and tolerable.

Key words

Prostate cancer
Brachytherapy
Radiation

This work is dedicated to:

My Family

Thanks for always being there for me
I hope I can make you proud