



// : // :



() TURBT :
C
() :
TURBT
(C) BCG C
(U/A,CBC)
stage T₁ % stage Ta % / % / . :
(%)
(BCG)
BCG
BCG :
BCG C :

()

()

E-mail: ahmadnia2001@yahoo.com

()

¹ TURBT: Trans Urethral Resection of Bladder Tumor



IVP

%

(TIS) %
(Stage Ta-T1)

%

(.)

BCG

(.)

PSA

BCG

(.)

C

()

C

³ PSA: Prostate Specific Antigen

² BCG: Bacillus Chalmette Guerin



IVP

BCG

BCG

BCG

BCG

(TURBT)

PSA

BCG

BCG

TURBT

BCG

Stage (% /)

(% /)

Stage T1

(%)

Ta

(%)

(% /)

(% /)

BCG

(WBC < /ml)

)

% /

C

(PL < /ml)

% /

(C

()

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BCG	+	C	
/	/	/	/
/	/	/	/

.() (P < /)

BCG

P Value	X ²	
> /	/	MMC
> /	/	CCT
< /	/	BCG
> /	/	CCT MMC
< /	/	BCG MMC
> /	/	BCG CCT

BCG :

.()

BCG	+	C	
/	/	/	/
/	/	/	/
/	/	/	/

:()

.(X²= / P < /) BCG



-

BCG	+	C	
	/	/	/
	/	/	/

(WBC&PL)

(% /) BCG

(% /)

BCG

(% /)

BCG

() (X2= / P< /)

(X2= / P< /)

:

()

BCG	+	C	
/	/	/	/
/	/	/	/

% /

% / :

+

% C

BCG

% / C

(.)

(.)

(TUR)

(X2= / P< /)



.() .() %

:

C

% T1G3

.() %

BCG

.()

.()

Tis T1G3 %

.()

%

.()

:

(DFMO)

.()

C

.()

DNA

KD

%

BCG

BCG

.()

BCG

KD

)

(C + C

⁶ Pansadore

⁴ Fukui

⁵ Doxyrubicin

BCG

(C +)

References:

- 1- Lamm DL, Herr H, Jakse G, Kuroda M, Mostofi FK, Okajima E, et al. Updated concepts and treatment of carcinoma in situ. *Urol Oncol* 1998; 4:130.
- 2- Bretton PR, Herr HW, Kimmel M. The response of patients with superficial bladder cancer to a second course of Intravesical BCG. *J Urol* 143: 710: 1990; 143:710-2.
- 3- Steinbach F, Schuster F. Intravesical adjuvant chemotherapy for superficial bladder cancer – results of a survey in Saxony. *Aktuelle Urol* 2005; 36 (4):337-41.
- 4- Elsasser –Beile U, Leiber C, Wolf P, Lucht M, Mengs U, Wetterauer U. Adjuvant intravesical treatment of superficial bladder cancer with a standardized mistletoe extract. *J Urol* 2005; 174(1): 76-9.
- 5- Valention F. Doxorubicin plus MMC Regimen in the prophylactic treatment of superficial bladder tumors: cancer 1988; 62. 1055-1060. 1055-1000.
- 6- Malkowicz SB. Management of superficial bladder cancer. In: Walsh PC, Retik AB, Vaughan ED, Wein AJ: *Campbell's Urology*, 8th ed. Vol 4. Philadelphia: W.B. Saunders; 2002:2785-2802.
- 7- Karege-SI; A randomized multicenter Trial of adjuvant therapy *in* superficial bladder Cancer; TUR only V.S TUR plus Mitomycin c or BCG. *J-Urol* 1996; 756(3):962-6.
- 8- Sonneveld P, Kurth KH, Hagemyer A , Ables J .Secondary Hematologic neoplasm after intravesical chemotherapy for superficial bladder carcinoma. *Cancer* 1990; 62: 35 - 65:23-5.
- 9- Oosterlinek W: Guidelines on diagnosis and treatment of superficial bladder cancer . *Minerva Urol Nefrol* 2004; 56(1):65-72.
- 10- Bouffioux C Kurth KH. Intravesical adjuvant –chemotherapy for superficial bladder TCC. *J Urol* 153(3):934-41.
- 11- Heney NM, Kooutz WW. Intravesical Thiotepa versus Mitomycin C in patients with TA, TI and TIS transitional cell carcinoma of the bladder: A phase III prospective randomized study. *J urol* 1998; 140(6):1390-3.
- 12- Moyano-Calvo-JL. Our experience with Mitomycin C in the prophylaxis of superficial bladder tumors retrospective study. *Arch-ESP-Urol*; 47(8): 750-4.
- 13- Fiore AA Iorio-B. Papillary -Like bladder calcifications following intravesical Mitomycin-c. A case report. *Minerva- Urol- Nefrol* 1993; 45(4):171-3.
- 14- Nohales- Taurines-G. Results of a prospective study of chemoprophylaxis with alternating Mitomycin C and BCG. *Arch-ESP-Urol*; 49(7): 686-92.

15- Her HW. Intravesical therapy. Hemotal Oncol Clin North 1992; 6:117-27.

16- Pansadoro V, Emiliozzi P, Defidio L, et al. Bacillus calmette-Guerin in the treatment of stage T1 grade 3 transitional cell carcinoma of the bladder: Long-term results. J Urol 1995;154:2054-2058.

17- Donald lamm. Long term results of intravesical therapy for superficial bladder cancer. Urologic clinic of North America 1993; 45(4):171-3.

18- Perabo FG, Muller SC. New agents in intravesical chemotherapy of superficial bladder cancer. Scand J Urol Nephrol 2005; 39(2):108-16.

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A Comparison between intravesical chemotherapy and Immunotherapy on superficial carcinoma of the bladder

Introduction: Intravesical chemotherapy or Immunotherapy are the mainpoint in treatment of superficial transitional cell carcinoma of bladder after performing TURBT⁷. But these methods have some limitations in terms of therapeutic response and the rate of complications. This study was performed to evaluate the complication rate, response to treatment and relapse of TCC⁸ after mixed chemotherapy with Thiotepa and Mitomycine C in comparison with immunotherapy by BCG.

Materials & Methods: In this clinical trial a total of 140 patients who admitted in urology department of Ghaem and Musa-Ebne –Jafar Hospital due to superficial TCC , were divided into 4 groups of 35. After TURBT the patients in first group were treated by Thiotepa, on second & third group we used monotherapy with Mitomycine C , BCG, respectively. So in the last group mixed therapy with Thiotepa plus Mitomycine C was performed.

All patients in each group were followed by physical exam, lab tests (CBC, U/A) and cystoscopy every 3 month for the first 2 years, and then every 6 month until the end of study. CBC tests were performed before and after 8 weeks of every of therapy. Then gathering data was analyzed through statistical methods.

Results: In this study, maximum prevalence rate of TCC was in 7 and 8 decades with an average of 66 years old. In the patients there was 3.5% T_{is}, 43.5% stage T_a and 53% stage T₁. Tumors were mostly seen in the lateral walls and the base of bladder(94%). In the group which treated with intravesical BCG, the recurrence rate of carcinoma was apparently lower than other groups and the remission's time was longer. The highest incidence rate of acute cystitis were seen in BCG-Therapy group, while in the mixed therapy group was lowest. Hematologic and allergic side-effects significantly lower with mixed therapy in comparison with monotherapy methods.

Conclusions: Rate of recurrence in BCG –therapy is lower but its complications, especially acute cystitis, is common. Administration of mixed therapy has been successful in reducing complications (both systemic and local) ; but the therapeutic response was like the monotherapy treatment.

Key words: Transitional cell carcinoma , TURBT, Thiotepa, Mitomycin C, BCG-therapy

⁷ Transurethral Resection of Bladder Tumor

⁸ Transitional cell carcinoma