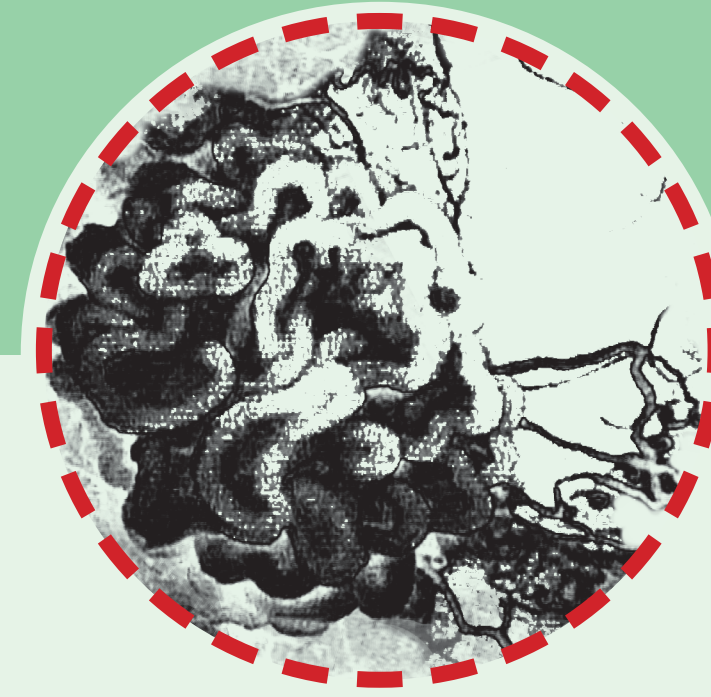


Patient-reported side effects comparing Mitomycin administered at weekly sessions and within 24 hours after TURB

– A Comparative study



Introduction and Objectives

Mitomycin (MC) is a cytostaticum used locally in the bladder after transurethral resection of the bladder (TURB) in patients diagnosed with non-invasive bladder cancer (NMIBC). MC is first line treatment in NMIBC and is usually given as a single treatment after TURB or once a week during a period of eight weeks. Most common side effects are irritative voiding symptoms and skin irritation by direct genital contact as well as by rash of hands and feet. The aim of the study was to compare patient-reported side effects between weekly MC instilment and MC instilment within 24 hours after TURB to improve knowledge and optimize clinical decision-making.

Material and Methods

A retrospective study based on a survey among 65 patients undergoing TURB at Randers Regional Hospital, Denmark who had MC instilled in the bladder within 24 hours. The day after instillation of MC, the patient was followed-up by telephone and side effects were documented using a standardized questionnaire. In 2016, 11 patients at Aarhus University Hospital started instillation of MC over a period of eight weeks in an outpatient setting. At every consultation we discussed urination, side effects and whether the patient had been able to contain the MC for the prescribed 2 hours since the last consultation. The medical files of each patient were examined to compare documented side effects.

Discussion

Overall 8 weekly treatments seems to have more serious side effect especially voiding symptoms compared with a single treatment according to patient reported events. A total of 8 visits to the Hospital may influence at the quality of life for the patient although not significantly documented and solely based on subjective estimation.

Results

Table 1

Comparison of sideeffects between two types of MC installiotherapy reported by proportions

Most common side effects	MC instilled 24 hours after TURB*	%	MC instilled once a week** (8 weeks)	%
Skin irritation	3	4,6	3	21
Urgency	30	46	7	50
Infection	0	0	4	29
Ability to contain Mitomycin in the bladder for 2 hours	33	51	6	43

*65 patients: 20 women and 45 men, **11 patients: 6 women and 5 men

Skin irritation was more frequent in patients treated weekly during eight weeks in the outpatient clinic. Urgency was seen in around 50% of patients in both groups; infection was only observed in patients receiving weekly treatments. The ability to contain MC was higher among patients who had the treatment within 24 hours compared to weekly installations. The overall experience was that the number of side effects increased and correlated with time of treatment.

Table 2

MC instilled in the bladder within 24 hours? after TURB as a single treatment

Advantages	Disadvantages
MC instilled through the already inserted catheter	The patient have to wait until the bleeding from the bladder is acceptable
No additional transportation to the hospital	Free voiding have to be insured
Socioeconomic advantage due to a single treatment	Hard to contain MC in the bladder during the prescribed 2 hours
	Extra staff resources in the inpatient department

Table 3

MC given in an outpatient setting once a week for 8 weeks

Advantages	Disadvantages
No extra staff resources as this is an outpatient treatment	The role as a patient persists for a longer time
The patient can leave the inpatient department when voiding is satisfactory	Side effects may be experienced for a longer period
	Long transportation to the hospital
	Possible transport costs for the society
	Costs of 8 treatments with MC is expensive due to absence from work and due to the society

Perspective

The results vidness that we might re-visit the patient-pathways and consider the following questions:

- Is it necessary to make changes in care-pathways using MC?
- Is it possible that the patient could influence the choice of treatment?
- Is it possible to involve the primary care nurse so the patient can have treatments with MC in a nurse-led clinic or at home?

Conclusion

This study suggests, although based on limited data, that patients who **only received treatment within 24 hours after TURB** had less self-reported side-effects compared to those treated weekly for eight weeks in the outpatient clinic. However, it would require further research and more data to qualify a comparison between treatment modalities and thereby evidence for a permanent change of the patient-pathway.