Role of Clean Intermittent Self Catheterization (CISC) in management of recurrent urethral strictures

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ABSTRACT

Objective
To evaluate the role of CISC in management of recurrent urethral strictures.

Patients and Methods
The study consisted of 111 patients of urethral stricture disease, who developed recurrence and required further sessions of Internal Optical Urethrotomy (IOU) at 6-12 weekly interval during a period of 2 years at Urology department, POF Hospital, Wah Cantt. After the second recurrence, IOU was performed and the patients were taught CISC before being discharged from the hospital. They were followed up by a repeat cystoscopy at 12 weeks interval. Recurrence, if any, was noted. They were asked about the acceptability of the procedure.

Results
Only 9.43% developed recurrence of urethral stricture at 12 weekly follow up. Majority of patients who completed the CISC program considered the method acceptable. No significant complications were seen.

Conclusion
CISC has an important role in management of recurrent simple urethral strictures and is recommended for such cases. (Rawal Med J 2010;35: ).

**Key Words**

Recurrent urethral strictures, CISC, Internal Optical Urethrotomy.

**INTRODUCTION**

Urethral stricture is a potentially debilitating disease if treated inadequately. Internal Optical Urethrotomy (IOU) is the treatment of choice, especially if the stricture is short and single.\(^1\) It is currently the most commonly performed treatment for new and recurrent strictures.\(^2\) Unfortunately, the procedure alone does not provide a permanent solution. Reported success rate of this procedure varies and it can recur, usually within 3-12 months.\(^3\) It yields a high failure rate with recurrence in approximately 50% of patients.\(^4\) Postoperative, CISC of a urethral stricture, primarily treated by internal urethrotomy, significantly reduces the stricture recurrence.\(^5\) Present study was conducted to evaluate the role of postoperative CISC in patients of recurrent urethral strictures.

**PATIENTS AND METHODS**

All those patients of urethral strictures were included who developed recurrence at 6 weekly follow up cystoscopy after undergoing two sessions of Internal Optical Urethrotomy. Study was carried out during two years period from January 2006 to December 2008. Complex cases with length of stricture more than 3 cm, cases with history of surgery involving bladder neck/prostate and associated polytrauma were excluded from the study. After a repeat IOU, patients were taught Clean Intermittent Self Catheterization (CISC) before the discharge. It was ensured that they learned the procedure and were able to perform it properly before going home. They were instructed
to do it twice a day for 4 weeks and were followed up in the OPD. They were assessed subjectively and if stream was adequate, frequency of CISC was reduced to twice a week. They were recalled for next cystoscopy after 12 weeks. They were also enquired about the acceptability of the procedure at the follow up.

RESULTS

Total number of cases included was 111. Five were lost to follow up and 106 cases could be assessed. All were males with mean age of 46 years (range 18-74 years). Bulbar stricture was present in 58 (54.71%), followed by membranous in 29 (27.35%) and penile in 19 (17.92%) patients. Trauma was the commonest cause in 71 (66.98%) while other factors were infective in 29 (27.35%) and idiopathic in 6 (5.66%) patients. Recurrence was noted at repeat cystoscopy in 10 cases (9.43%). There were no major complications. Minor discomfort was reported by 19 cases, bleeding and pain being the commonest. Ninety five (89.62%) patients were comfortable with the procedure and considered it to be practical and acceptable. The rest were apprehensive because of minor discomfort associated with it and were satisfied after counseling.

DISCUSSION

CISC has an important role in managing recurrent urethral strictures. Urethral stricture is a potentially difficult disease to cure as there is a high recurrence rate especially with endoscopic optical urethrotomy as a primary treatment. Reported recurrence rate is around 50%. Various methods have been suggested to reduce this recurrence, commonest being dilatation and clean intermittent self catheterization. There is no significant difference between the two methods regarding the duration of follow-up, the length of stricture, and complications, however, patients on self calibration had narrower
strictures and a significantly lower restructur rate. The method offers the possibility of long-term cure and reduces the number of patients who require urethroplasty. Thus, it has been suggested as an effective and safe way of managing recurrent urethral strictures and a better method than repeated sounds dilatation.

Our study has shown that it is an effective way of managing recurrent strictures. Very few patients had recurrence after regular use of CISC; narrowing was minimal as a 17 Fr cystoscopy sheath could pass easily. The recurrent cases were mainly involving posterior urethra which is potentially difficult to treat. Moreover, very few patients were lost to follow up and majority of them found it an easy method to learn and use. Counseling plays an important part in this regard. Those patients, who were apprehensive because of minor complications, were satisfied after counseling at follow up. Generally, majority found it acceptable and simple way of treatment.

Gnanaraj et al assessed 78 patients who were on self calibration comparing them to group of 49 patients on dilatation. The first group had a significantly lower re-structur rate of 5%. Lauritzen et al reported frequency of recurrence after internal urethrotomy of 9% in the patients randomized to CISC. Mandal et al started 5 cases on CISC program after primary endoscopic treatment and during a follow-up of 6 to 18 months, no patient developed recurrence. Kjaergaard et al randomized 21 cases to undergo CISC and 19% developed recurrence of urethral stricture within the first postoperative year in the CISC group with no complications. Our study showed a recurrence rate of approximately 9%. No complications were seen.
CONCLUSION

Postoperative CISC is an easily taught method with good patient acceptability which helps in reducing the recurrence rate with very few complications. It is recommended for management of selected patients of recurrent urethral strictures.

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REFERENCES


2. Andrich DE, Mundy AR. Urethral strictures and their surgical treatment. BJU Int 2000;86;571.


