

ABSTRACT

Introduction: Posterior urethral valves is the most common structural cause of urinary outflow obstruction in pediatric practice leading impaired renal function in a third of patients after the resolution of obstruction. The issue of urinary diversion is somewhat controversial as endoscopic valve fulguration is considered the treatment of choice. If the infant is too small, cutaneous vesicostomy can be performed as a temporary measure. The vesicostomy has proved to be a safe and efficient treatment, with long-term results in preserving renal function equal to those of primary valve ablation.

The aim of our study: is to evaluate and compare the outcome of posterior urethral valve fulguration versus vesicostomy in patients during first six months of life with serum creatinine above 0.5mg/dl in terms of renal functions and upper urinary tracts dilatation.

We wanted to find out answers for several important questions:

Which of both management options has better outcome?

Is endoscopic valve fulguration the treatment of choice?

Does vesicostomy have a role in improving renal function?

Will our choice change in cases with high serum creatinine level and severely affected upper tracts especially during first six months of life?

Patients and methods: This study included 30 patients. The 1st group is classified as group A were treated by fulgeration and the 2nd group is classified as group B were treated by vesicostomy.

All the patients were evaluated after management as regards improvement in their creatinine levels, attacks of urinary tract infections, improvement in hydronephrosis and reflux grades.

Results: After management laboratory and radiologic improving occurred in most cases with varying degrees. Vesicostomy was the better surgical option with better results. There were statistical significant differences towards vesicostomy group in postoperative serum creatinine level and degree of reflux, otherwise both groups showed almost same results as there was no significant statistical difference between both groups regarding post operative attacks of urinary tract infections and changes in hydronephrosis in U/S.

Conclusions: Management of PUV can either be done by vesicostomy or lry valve fulgeration even in young infants during first six months of life with creatinine level above 0.5mg/dl.

In young infants with high serum creatinine level and severely affected upper urinary tracts with either hydronephrosis or reflux with or without urinary tract infections; vesicostomy should be considered as the treatment of choice.
