

بحث رقم (٢)

Visual internal urethrotomy for management of urethral strictures in boys: a comparison of short-term outcome of holmium laser versus cold knife

النشر بمجلة :-

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الملخص الانجليزي

Purpose:

To compare efficacy and safety of visual internal urethrotomy (VIU) using holmium laser (Ho:YAG) (group A) versus cold knife (group B) in children with urethral strictures. It may be the first comparative study on this issue in children.

Patients and Methods:

This study compared Ho:YAG group, which was evaluated prospectively from January 2014 till January 2016, versus cold knife group, which was a historical control performed from March 2008 till February 2010. Children ≤ 13 years old with urethral strictures ≤ 1.5 cm were included successively. Recurrent cases, congenital obstructions and cases with complete arrest of dye in voiding cystourethrography were excluded. Scar tissue was incised at twelve o'clock. Outcome was compared using Student's t, Mann-Whitney, Chi-square or Fisher exact tests as appropriate.

Results:

Each group included 21 patients. Mean age was 6.27 ± 3.23 (2-13) years old. Mean stricture length was 1.02 versus 1 cm in group A versus B, respectively ($p = 0.862$). Ten cases of penile/bulbous strictures and another 11 cases of membranous strictures were found in each group. There was no significant difference between both groups in preoperative data. Success rate for initial VIU was 66.7% in group A versus 38% in group B ($p = 0.064$). This was associated with significantly higher Qmax

in group A (mean 16.52 vs 12.09 ml/s; $p = 0.03$). Success rate after two trials of VIU was 76.2% for group A and 47.61% for group B ($p = 0.057$). No complications were reported in both groups.

Conclusions:

Laser VIU has a higher success rate than cold knife VIU for urethral strictures ≤ 1.5 cm in children with significantly higher Qmax. Both are easy to perform, low invasive and safe.