



Actas Urológicas Españolas

www.elsevier.es/actasuro



NEW TECHNIQUES AND TECHNOLOGIES

Endoscopic treatment of urethroreferential reflux in children[☆]

B. Fernández Bautista*, A. Parente Hernández, R. Ortiz Rodríguez, L. Burgos Lucena, J.M. Angulo Madero

Departamento de Urología Pediátrica, Hospital General Universitario Gregorio Marañón, Madrid, Spain

Received 19 July 2017; accepted 20 July 2017

KEYWORDS

Urethroreferential reflux;
Epididymo-orchitis;
Endoscopic injection

Abstract

Introduction: Urethroreferential reflux is an underdiagnosed condition, and there is no consensus on its treatment. Our objective is to show our experience in the minimally invasive treatment of this disease using endoscopy.

Material and methods: We present 8 patients with recurrent suppurative orchitis due to urethroreferential reflux treated endoscopically during the period 2008–2013. All patients presented unilateral orchitis. The minimum number of episodes of orchitis per patient prior to the operation was 3. The endoscopic treatment consists of ureteroscopy, locating the ejaculatory orifices and conducting an intraoperative contrast study to demonstrate the urethroreferential reflux. Subejaculatory dextranomer/hyaluronic acid was subsequently injected in all the cases.

Results: The mean surgical time was 15 min, and the procedure was outpatient for all patients. There were no postoperative complications, and the patients had good clinical progression. Only one case required a second injection of dextranomer/hyaluronic acid. The follow-up of these patients showed a complete resolution of the epididymitis and good testicular development, with a follow-up longer than 4 years in all cases.

Conclusion: We propose this form of treatment as a minimally invasive, easily reproducible alternative that shows good long-term results in our small series of patients.

© 2017 AEU. Published by Elsevier España, S.L.U. All rights reserved.

* Please cite this article as: Bautista BF, Hernández AP, Rodríguez RO, Lucena LB, Madero JM. Tratamiento endoscópico del reflujo uretroreferencial en niños. Actas Urol Esp. 2018. <https://doi.org/10.1016/j.acuro.2017.07.007>

Corresponding author.

E-mail address: bea.bfb89@gmail.com (B.F. Bautista).

PALABRAS CLAVE

Reflujo
uretroreferencial;
Orquiepididimitis;
Inyección
endoscópica

Tratamiento endoscópico del reflujo uretroreferencial en niños**Resumen**

Introducción: El reflujo uretroreferencial es una entidad infradiagnosticada, no existiendo consenso en su tratamiento. Nuestro objetivo es mostrar nuestra experiencia en el tratamiento mínimamente invasivo de esta dolencia mediante tratamiento endoscópico.

Material y métodos: Presentamos 8 pacientes con orquitis supuradas de repetición por reflujo uretroreferencial tratados de forma endoscópica en el período de 2008-2013. Todos presentaron orquitis unilaterales. El número mínimo de orquitis por paciente anterior a la intervención fue de 3. El tratamiento endoscópico consistía en una uretroskopía con localización de los orificios eyaculatorios y un estudio de contraste intraoperatorio para demostrar el reflujo uretroreferencial. Posteriormente se inyectó ácido hialurónico/dextranómero subeyaculatorio en todos los casos.

Resultados: El tiempo medio de la cirugía fue de 15 min, siendo un procedimiento ambulante en todos los pacientes. No hubo complicaciones postoperatorias. Los pacientes presentaron buena evolución clínica. Solo un caso requirió el uso de una segunda inyección de ácido hialurónico/dextranómero. El seguimiento de estos pacientes mostró la resolución completa de los cuadros de epididimitis y un buen desarrollo testicular, con un seguimiento mayor de 4 años en todos los casos.

Conclusión: Proponemos esta forma de tratamiento como una alternativa poco invasiva, fácilmente reproducible y que ha presentado buenos resultados a largo plazo en nuestra pequeña serie de pacientes.

© 2017 AEU. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.

Introduction

Urethroreferencial reflux is a rare and underdiagnosed entity.¹ It is described in different conditions that condition a urethral obstruction that leads to high voiding pressures and is a cause of urethroreferential reflux (hypospadias, anorectal malformations, urethral stenosis).²

The treatment of recurrent suppurative epididymitis is complex, from direct surgery to vasectomy in some cases,³ and there is no consensus on the therapeutic approach.

The objective of our work is to show our experience in the minimally invasive treatment of this disease through endoscopic treatment.

Material and methods

We present 8 patients with recurrent suppurative orchitis despite nocturnal antibiotic prophylaxis due to urethroreferential reflux, treated endoscopically in our center in the 2008–2013 period.

The patients presented the following conditions: 2 proximal hypospadias reoperated due to some complication of the corrective surgery (urethral stenosis, urethral fistulas); 2 posterior urethral valves treated with endoscopic ablation; an ectopic ureter that emptied into seminal vesicles; an anorectal malformation with perineal fistula and penoscrotal transposition; a neurogenic bladder secondary to myelomeningocele, and a urethral hypoplasia secondary to anorectal malformation with fistula in H.

All our patients had unilateral recurrent orchitis as the main symptom, despite nocturnal antibiotic prophylaxis. The minimum number of orchitis per patient before the

intervention was 3. In all patients, we found pathological urine cultures, the most frequent microorganism found being *Escherichia coli*, followed by *Klebsiella pneumoniae* and, finally, *Enterococcus faecalis* (Table 1).

Radiological diagnosis was made by testicular ultrasonography in the acute phase and serial voiding cystourethrography in the voiding phase in all cases (Figs. 1 and 2).⁴

Prior to the treatment, the urethral obstruction presented by all the patients was treated by urethrotomy, intermittent bladder catheterization, or ablation of the posterior urethral valves, without solving the orchitis symptoms in this way.

For the endoscopic treatment, a urethroscopy is performed first to locate the ejaculatory orifices. In 5 children, they were found at the level of the veru montanum and 3 had an ectopic location (one in the bladder neck and 2 in the posterior urethra, lateral to the veru montanum).

Subsequently, they are canalized with 4Fr tutor on guide 0.018" and a retrograde contrast study is performed to demonstrate the correct identification of the orifices of discharge of the ejaculatory ducts. In this way, hyaluronic acid/dextranomer (Deflux®), subejaculatory and submucosal (0.2–0.4 cc), is injected.

Results

The average time of intervention was 15 min, being outpatient in all cases. The children did not need postoperative analgesia after hospital discharge. No patient presented intra- or postoperative complications. The average injection volume per patient was 0.3 cc per injection.

The patients presented a good clinical evolution, with a complete resolution of the epididymitis symptoms in 7

Download English Version:

<https://daneshyari.com/en/article/8769389>

Download Persian Version:

<https://daneshyari.com/article/8769389>

[Daneshyari.com](https://daneshyari.com)