Case Report

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Ureteral Blockage as a Complication of Burch Colposuspension: Report of 6 Cases

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Key Words

Burch procedure
Ureteral obstruction
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Abstract

Burch colposuspension for correction of urinary incontinence is rarely followed by complications. A very rarely described complication is ureteral kinking, which tends to occur in patients with previous pelvic surgeries. We present 6 additional cases of this rare complication and recommend appropriate intraoperative dissection as well as postoperative alert for early diagnosis, which improves prognosis.

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Introduction

Urinary stress incontinence is a symptom occurring rather frequently in clinical gynecology, usually among women with relaxation of the anterior portion of the pelvic and urogenital diaphragms and of the aponeurotic supports. Urethrovaginal fixation to Cooper's ligament, first described by Burch in 1961 [1], is a technique commonly used to correct this symptom. The long-term cure rate is 85–90% [2] and the procedure has a low rate of major complications. Ureteral blockage is rare and has been reported thus far on 2 occasions as a consequence of ureteral kinking after colposuspension [3, 4]. In the present paper we report 6 cases of this unusual complication, which may have serious consequences for the patient if not diagnosed early.

small urethrocele and minimal cystocele. Urinary stress incontinence was diagnosed on the basis of medical history, physical examination, full-bladder stress test, contrasted X rays of the bladder and, when possible, urodynamic study. The surgical technique used consisted of bilateral vaginal fundus suspension to Cooper's ligament with 3 No. 0 vicryl sutures under moderate tension. There were no intraoperative complications.

Of the 483 patients, 4 had immediate or delayed postoperative lumbar pain and 2 were anuric on the 1st postoperative day. The clinical data concerning these patients are presented in table 1. The 6 patients were diagnosed to have ureteral blockage on the basis of intravenous pyelography and cystoscopy. Each patient was submitted to further surgery for removal of sutures that caused

ureteral kinking unilaterally (cases 1, 2 and 3) or bilaterally (cases 4, 5 and 6), with intraoperative cystoscopic control. Control intravenous pyelography performed in each case was normal. An early complication was reversible acute renal infection in 1 patient. A delayed complication was continued urinary stress incontinence in 2 patients (cases 2 and 4).

Case Reports

A total of 483 patients were submitted to Burch colposuspension at the Department of Gynecology and Obstetrics, University Hospital of Ribeirão Preto, University of São Paulo, over a period of 5 years. All of these patients presented urinary stress incontinence,

Conclusions

Burch colposuspension has been widely used to treat urinary stress incontinence. The cure rate ranges from 85 to 90% and the incidence of complications is low,

240

Ferriani/Silva de Sá/Dias de Moura/Charaffedine/Hockgreb de Freitas

usually consisting of bladder damage and bleeding in the retropubic space [2]. The complication reported here is rare and consists of kinking of one or both ureters as a consequence of colposuspension. The few cases reported thus far involved patients submitted to previous abdominal hysterectomy [3, 4]. In the present cases, even though the patients had not been submitted to hysterectomy, all of them had been previously submitted to some type of pelvic surgery. This fact shows a positive association of this complication with anterior pelvic surgery, probably owing to alterations in local anatomy or to processes of periureteral fibrosis that favor ureteral kinking. Even though this is a serious complication, clinical suspicion and early diagnosis have a positive effect on prognosis. This complication should always be considered by the surgeon when the patient presents symptoms of lumbar pain, oliguria or anuria during the immediate postoperative period.

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