Table 4. — Side effects and complications in patients with missed abortion or intrauterine fetal death during and after induction of labor with PGE2.

Erythem?	6 cases	18.75%
Diarrhea	1 case	3.12%
Uterine curettage	9 cases	28.12%

There were no modifications of vital signs nor in laboratory exams performed before, during and after the infusion.

DISCUSSION AND CONCLUSION

The use of 16-phenoxy-prostaglandin-E2-methylsulfonylamide is extremely useful in the induction of labor in cases of missed abortion or intrauterine fetal death. It is effective (100% of cases) regardeless of age, parity and Bishop score, causes minimal side effects (21.87%-7 cases), and is accepted by patients. The high frequency of uterine curettage, which

occurred especially in cases in which there was a long interval between interruption of pregnancy and induction of labor, is probably due to modification of the anatomical characteristics of the chorionic tissue.

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BIBLIOGRAPHY

Gruber W. S., Baumgarten K.: Am. J. Obst. Gyn., 137, 8, 1980.

Karim S. M. M., Filshie G. M.: Brit. Med. J., 3, 180, 1970.

Montoneri C., Gulisano A.S., Fichera M., Panella M., Pepe F., Raspagliesi F., Tarascio A., Torrisi G.: « L'impiego della 16 fenossi-prostaglandina E2 metil-sulfonilamide mediante infusione endovenosa nell'aborto e nella morte endouterina del feto ». Proceding LXIII Congresso Nazionale della Società Italiana di Ginecologia ed Ostetricia, Milano, 1984, p. 1473, Monduzzi ed., Bologna, 1984.

SIMPLE ASSYMPTOMATIC ORTHOTOPIC URETEROCELE IN PREGNANCY: ANALISIS OF A CLINICAL CASE

S. VALENTE - F. FABRIS - G. L. ONNIS - G. B. NARDELLI Institute of the Gynecological and Obstetric Clinic of the University of Padua (Director: Prof. A. Onnis)

Summary: In the present paper the Authors, taking for a starting point the occasional recognition of an asymptomatic orthotopic urethrocele in pregnancy, refer to the present knowledge of its embryology, pathological anatomy and the form of therapeutic approach. In the light of such experience they confirm the role of clinical-instrumental diagnostic investigations of purely gynecological and obstetric pertinence in the recognition of pathologies of urological interest.

The urethrocele is a nosological entity represented by a pseudocystic submucosa dilation of the terminal extremity of the urethra (1-2).

Different theories have been suggested concerning the embryogenesis of this malformation: some Authors consider it the persistance of Chwalle's membrane with consequent obstruction of the junction between the mesonephric membrane and a primitive urogenital sinus (3).

The theory of ureteral dilation secondary to the obstruction by stenosis of the urethral meatus was emphasized in the discussion on the studies of Williams and Woodward who provided evidence that not all urethroceles are characterised by a stenotic orifice (4).

From the morphostructural point of view, recent electron-microscopic studies have documented the absence of fine miofilaments in the site of the urethrocele. Such microstructures have always been revealed in the segment proximal to the urethra: which induces the conclusion that the urethrocele is related to a segmental arrest in the embryonal development of the distal portion of the urethra (5).

The classification recently proposed by Bondonny (6) distinguishes four varieties of urethrocele according to whether it is simple or associated with urethral duplicity and according to whether the meatus of the urethrocele is intravesical orthotopic or subcervical ectopic.

The simple and orthotopic form is more frequently met in adults (7), while the variety of ectopic urethrocele with urethral duplicity, because of the consequences deriving from it, is generally recognised from the pediatric age (8).

In fact the simple orthotopic urethrocele is, in the majority of cases asymptomatic or occasionally associated with pelvic pains, infections of the urinary tract or vesical instability.

This variety is generally of modest volume and does not give rise to urinary retention upstream, so much so that the general opinion is that the simple urethrocele, totally asymptomatic and accidentally recognised, marking X-ray photographs of anomalies due to the upper urinary tract, needs no treatment (9).

In cases of simple orthotopic ureterocele with considerable retention an endoscopic section of the meatus may be carried out, or an excision of the ureterocele with reimplanting antireflux of the coresponding ureter transvesically according to Cohen's technique.

The orthotopic urethrocele with urethral doubling represents a comparatively rarely encountered pathology (11) and the degree of urinary retention deriving from it is generally slight. If both ureters are only moderately dilated the surgical treatment used may consist of the simultaneous antireflux reimplanting of the ureters themselves in the same tunnel. Viceversa when the urethral dilation is very marked although the pielic areas remain integral and functional, an interpielic anastomosis may be carried out with the ablation most distal possible of the ureter draining the upper pielic areas. If, on the other hand, the same areas prove nonrecuperable from a functional point of view, it is preferable to carry out the ablation by the lumbar via, reserving the antireflux reimplantation transvisically to cases of eventual persistance of vesical-urethral reflux.

The simple ectopic urethrocele is a variety very rarely encountered which is generally associated with renal lesions so severe as to require nephrectomy. In cases where the kidney can be preserved, it is necessary to carry out the ablation of the urethrocele with antireflux urethral reimplantation.

The ectopic urethrocele with urethral doubling represents about 80% of the urethroceles met in children (12). The surgical approach to such an anomay is controversial: according to some Authors it is necessary to correct, in a single operation, the entire malformation both at the renal and the vesical levels (13). According to others, however, it is sufficient to limit surgical treatment only to the lumbar on the upper pielic area, leaving the vesical stage (14). Both these surgical approaches, the "radical" and the "simplified", have therefore in common the obligatoriness of

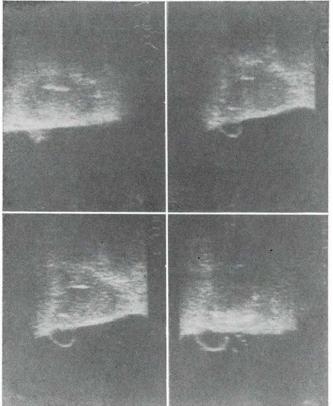


Fig. 1. — Echographic picture of left orthotopic urethrocele. In the various photograms the progressive emptying of the urethrocele during the course of the echographic enquiry is evident.

the treating of the upper pielic area corresponding to the urethrocele.

The most frequent complications of the urethrocele are represented by the lithiasis and by the prolapse of the urethrocele itself (15 - 16).

The lithiasis of small simple urethroceles may be resolved endoscopically at the same time as the incision of the meatus. The removal of calculi, on the other hand, represents a global surgical stage of the forms chosen for operative approach.

Eventually associated renal lithiasis must be resolved in the course of the treatment of the urethrocele in order to avoid its operative migration.

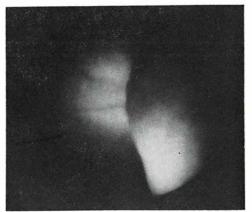


Fig. 2. — Left orthotopic urethrocele: cystoscopic picture. The raising of the vesical mucous in correspondence to the perimeatal area is noted.

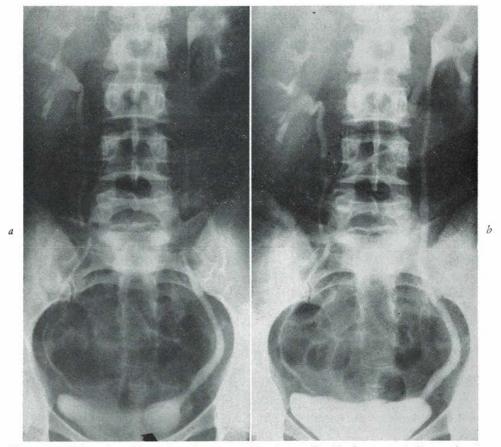


Fig. 3. — Left orthotopic urethrocele: urographic picture. In (a) the arrow indicates the site and dimensions of the urethrocele, made opaque by the contrast medium, before its emptying into the vesica (b).

The prolapse of the urethrocele to the vulva through the urethral meatus is a rare complication. In emergency it must necessarily be limited to the reduction of the prolapse, with the placing in position of a urethral probe and a small ball in order to avoid relapses. It will therefore be obligatory to plan resolutive surgical intervention on the prolapsed uretrocele.

CLINICAL CASE

A 30 year-old patient came to our notice in May 1985, having decided in the 8th week of pregnancy, to ask for termination.

Referring to memories of her past, the patient spoke of a normal psycho-physical development, without ever having undergone surgical treatment or been in hospital. She had been married for five years and had borned two children without any complications during pregnancy and with normal deliveries.

From the age of 20 she mentioned having been subject to desultory episodes of acute cystitis (though never more than 2-3 times a year) which had been treated with common urinary disinfectants and without the carrying out of urine culture or antigiograms.

In the course of checking for the pregnancy termination operation the patient was submitted to pelvic echography: following this investigation suspicion was aroused of a left urethrocele (fig. 1), subsequently confirmed in the centre of the cystoscopy (fig. 2).

The descending pyelography, successively carried, out documents the colicpyelic area and the absence of vesical-urethral reflux (figg. 3 a e b).

The urine test showed a P.S. of 1018 with absence of protein, haemoglobin, glucose, ketonic bodies, bilirubin, biliary salts, urobilinogen and nitrotes. The centrifuged urine test with phasecontrast reading documented the presence of 1 - 2 leukocystes per field, and of some cells of the lower pathways. The urine culture proved negative.

The diagnostic conclusion was therefore of asymptomatic simple left urethrocele.

CONSIDERATIONS

The casual sample of a simple ureterocele has induced us to confirm the necessity of not undervaluing in any case the examination of recurrent episodes of apparently banal cystitis.

In the case specified, the echographic enquiry proved most orientative; from the diagnostic suspicion presented by that method followed the carrying out of the cystoscopy which confirmed the sample, and by the urography, with which we were able to exclude the possible anomalies deriving from the kidney and the colic-pyelic and proximal urethral districts.

We therefore consider that, in certain cases, such methods may be profitably

associated with basic examinations in the evaluation of patients affected by urinary pathologies of various entities.

BIBLIOGRAPHY

- 1) Gonzales T.: "Overview ureteroceles. Current Operative Urology". Whitehead E.D., Leiter E. (eds.), Harper and Row Publishers,
- IInd ed., Philadelphia, 552, 1984. 2) Tanagho E. A. A.: J. Urol., 107, 5, 729, 1972.
- 3) Chwalle R.: Urcl. Cutan. Rev., 31, 449, 1927.
- 4) Williams D. I., Woodard J. R.: J. Urol., 92, 635, 1964.
- 5) Tokunaka S., Gotoh T., Koyanagi T., Tsuji I.: J. Urol., 126, 726, 1981.
- 15) Rodriguez J. V.: Eur. Urol., 10, 36, 1984.16) Whiterington R., Smith A. M.: J. Urol., 121, 813, 1979.
- 6) Bondonny J. M., Diard F., Bucco P., Germaneau J., Cadier L.: Ann. Urol., 15, 120, 1981.
- 7) Abrahamsson L.O., Olsen P.R., Mathiesen F.R.: Scand. J. Urol. Nephrol., 15, 239,
- 8) Caldamone A. A. A., Snyder H., Duckett J. W.: J. Urol., 131, 1130, 1984.
- 9) Hendren W. H., Mitchell M. E.: J. Urol., 121, 590, 1979.
- 10) Tortora F.L., Landes R.: J. Urol., 127, 31, 1982.
- Brueziere J., Jablonski J. P., Fretin J.: J. Urol., 85, 704, 1979.
 Hennebert P. N., Wese F. X., Cornu G., Clause D.: Acta Urol. Belg., 48, 370, 1980.
 Koyanagi T., Hisajima S., Goto T., Tokunaka S., Tsuji I.: J. Urol., 123, 538, 1980.
- 14) Cendrom J., Melin Y., Valayer J.: Eur. Urol., 7, 321, 1981.