

14 Cases of Uretero-Vaginal Fistula in the Provincial Hospital of Abeche, Chad

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Received: 25 Sep 2021; Received in revised form: 25 Oct 2021; Accepted: 05 Nov 2021; Available online: 16 Nov 2021

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Abstract

Introduction: Urethro-Vaginal Fistula (UVF) is a communication between the ureter and the vagina. It is generally about an iatrogenic lesion happening in the decline of gynaeco-obstetrical pelvic surgery. Its main manifestation is the permanent leak of urines through the vagina with the notion of normal micturition conservation except in the case of bilateral lesion. The objective of this study was to describe the clinical, diagnostic, and therapeutic aspects. Patients et methods: It was about a retrospective and descriptive study focusing on the cases of Urethro-Vaginal Fistulas diagnosed and taken care of in the Provincial Hospital of Abeche from January 2011 to December 2016. The studied variables were sociodemographic, clinical, para clinical, therapeutic, and evolutionary. Results: During the study period, 14 cases of UVF have been diagnosed and treated. The average age of patients was 25. The average gestation is 3 and that of parity 2. The aetiology of the UVF: hysterectomy (n=5 that is 35,71%) and the caesarean section (n=9 that is 64,29%). The diagnosis was kept after a clinical and para clinical check-up mainly the examination through speculum, the examination through the blue of methylene, and the UIV with negative profile photos. The E.C.B.U. has been positive in 4 cases (E. Coli), the presence of creatine was normal. The treatment consisted in urethro-vesical re-implantation with an anti-reflux device. The immediate post operating results were simple in 12 cases and the 2 other cases were marked by an E. Coli infection. Conclusion: UVF is a rare complication in gynaeco-obstetrical surgery. The reference treatment is the urethro-vesical re-implantation respecting the anti-reflux system.

Keywords— Urethro-vaginal fistulas, gynaeco-obstetrical surgery.

I. INTRODUCTION

Urethro vaginal fistulas are a rare entity that represent about 8% of uro-genital fistulas [1, 2]. They occur very often after a gynaeco-obstetrical surgery badly done [3-6]. It makes an abnormal communication between the ureter and the vagina [7]. The clinical signs are dominated by a permanent urinary leak and the conservation notion of the normal micturition except when the lesion is bilateral. The ureteral lesion often associates fistula and ureteral stenosis explaining the impact on the kidney [8]. Many therapeutic modalities are described in the literature.

UVF poses diagnostic, therapeutic, and prognosis problems mainly on the same side kidney

The objective of our work was to report the diagnostic, therapeutic and evolutionary aspects of UVF at the urology service in the Provincial Hospital of Abeche, Chad.

II. PATIENTS AND METHOD

It was about a retrospective and descriptive study gathering files of women victim of UVF taken care of in the Provincial Hospital of Abeche, Chad from January 2011 up to December 2016. Were included, patients suffering from unwilling, permanent leakage of urines through the vagina in the decline of the pelvic surgery, that the clinical and para clinical check-up has concluded to UVF taken care of and supervised in the said service. Studied variables were: the age of the patients, the

reason of consultation, surgical backgrounds, the type of the fistula, the state of the tissue, the duration of the fistula, the occurring circumstances of the lesion, therapeutic modalities, and post operative results at 1 month and at 3 months. Therapeutic results are judged good or bad depending on the micturition quality, the urinary continence and the impact on the upper urinary apparatus.

III. RESULTS

During the study period we have listed and operated 678 cases of uro-genital fistulas of which 14 cases of urethro-vaginal fistulas (2,06%). The average age of our patient was 25 with an extreme from 15 to 60. The patients' gestation was 3 (with extremes of 1 and 5). The parity was 2 with extremes of 1 and 6. UVF occurred in the decline of the gynaecological pelvic surgery mainly: hysterectomy (n=3), the cure of the genital prolapses (n=2) and the caesarean section. The consultation reason was principally about the permanent leakage of urines without improvement by changing the position for all patients associated with 8 cases of lumbar pain.

The time spent between the leakage of urines and the medical consultation varied between 2 months and 5 years.

The UVF diagnosis has been kept on the basis of examination through the speculum and the test through the blue of the methylene that has allowed to be objective in all the cases of clear urine leaks (without being tinted with the blue of the methylene) in the vaginal cul-de-sac. Thanks to negative profile photos UIV had allowed to confirm that the lesion resided on the left ureter (n = 9) and on the right

ureter (n = 5). ECBU has allowed to identify the E. Coli in 4 cases (E. Coli). The presence of creatine was normal for all patients.

The treatment has consisted in a retrovesical reimplantation with all patients using an anti-reflux process according to Lead better Politano's technique in setting a ureteral catheter and a vesical catheter. The average duration of the ureteral catheter was 10 days, that of the vesical catheter was 15 days. The average duration of hospitalization was 21 days. The immediate post operating results were simple in 12 cases and the 2 other cases were marked by an E. Coli infection.

IV. DISCUSSION

Obstetrical fistulas (UVF) are rare comparatively to vesico-vaginal obstetrical fistulas. In fact, within the 6 years of charge, we have taken care of 14 cases, with an average of 2.33 cases a year. This rarity is also mentioned by GOODWIN [9] and BENNANI [10] who report respectively 21 cases in 20 years and 17 cases in 17 years. Literature [11,13] report a frequency that varies between 6.5% and 8.1%. However, it is good to notice that Falandry [12] finds higher frequency (39.5%).

UVF is the young woman's pathology. In fact, the average age of the patients was 25. That shows the importance of the psychologic and economic tragedy for it deals with young women in flourishing period of genital activity [6, 2]. This younger age of patients has been reported by many authors as shows the table 1.

Table 1

AUTHORS	COUNTRIES	STUDY YEAR	AVERAGE AGE
SANDA [14]	NIGER	20016	27
ANOUKOUM [15]	TOGO	2010	21
HETEGEKIMANA [16]	RWANDA	2005	27
KABORE [17]	BURKINA	2014	35
DIALLO [18]	GUINEE CONACRY	20016	36,5

It results from the study a clear predominance of the UVF obstetrical aetiology as reports literature [19-20]. According to literature caesarean sections is the most incriminated intervention. Emergency caesarean sections in rural areas with poor sanitary cover are without any doubt responsible and especially when they are practiced by non-expert hands. In addition, gynaeco-obstetrical surgery, hysterectomy in particular is the biggest provider of UVF [21].

The ureteral lesion can be complete or incomplete [22]. It concerns always the pelvic ureter in a more or less level near the bladder. Lesions are explained by the close anatomic relations between ureters and uterine arteries. The dangerous sites are represented by: the superior channel, the large ligament base, the crossing with the uterine artery, the urethro-vesical junction (dissection of the cervix) UVF dwells very often on the left [23, 24, 25] as the study mentions it with 64%. YU et Coll. [23] would explain this predominance by the fact that the majority of

surgeons are right handed and they stand on the right side of the patients during the intervention. According to CISSE et Coll [20], the little pelvis anatomy, with the left ureter less accessible by the mesosigmoide presence could be a non-negligible argument.

The diagnosis is rarely done in pre operatory though very often signs of operatory difficulties are found such as: obesity, bleeding, inflammation, endometrioses. Iatrogenic lesion is pre operatory et it reveals itself in post operatory, urines are drained up to the level of the vaginal tranche suture. Sometimes the urinoma evacuation thus created does not work in the post operatory days or weeks and this will be responsible for a painful and febrile clinical symptomatology [8].

The diagnosis is often easy in front of a permanent leakage of urines through the vagina, happening after a pelvic surgery, with conserved micturition and water-tight bladder in examination under valve [10, 2,26, 27, 28].

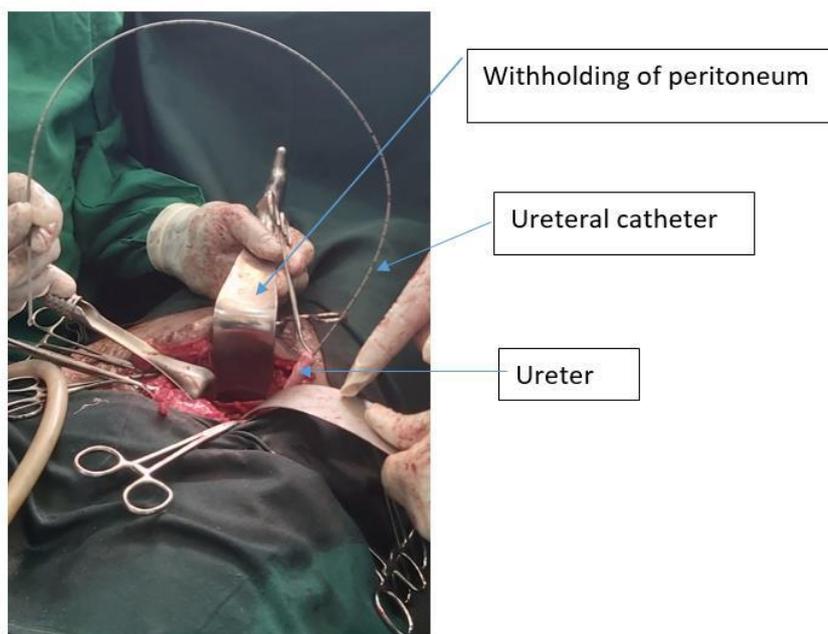
All patients have had urethro-vesical reimplantation according to Leadbetter Politano's technique respecting Paquin's rule. This technique constitutes the ideal process to treat the 1/3 inferior lesions and even the inferior of the ureter [10, 26]. BENNANI [10] preconizes it in treating

UVF of first intention. When the ureter is wronged on a longer distance, ileoureteroplasty constitutes a smart solution. Nevertheless, intestinal reabsorption constitutes a disadvantage of this technique. BENSON [29] reports good results with 10 operated sick people for UVF using that technique.

The immediate or delayed time-limit for reparation is discussed according to authors, waiting 2 or 3 months would be a reasonable attitude [30, 28] since some UVF have been dried spontaneously without any treatment. The best therapy remains prevention of such lesions which passes through better knowledge of anatomic relations and a particular attention in the moment of dissections and ligatures [32].

V. CONCLUSION

Urethro-vaginal fistulas represent a complication of all pelvic surgery particularly the gynaeco-obstetrical surgery. They occur with younger subjects at the age of sexual and physical activity with a direct impact on psychological and economic development. The diagnosis is often easy and must be early in order to avoid the destruction of the kidney. The reference treatment of UVF remains surgery.



Picture1: Cure of urethro-vaginal fistula

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