

Research Article

Surgical Management of Genito-Urinary Prolapse at the Gynecology and Obstetrics Department of Ouakam Military Hospital: About 72 Cases

MM Niang*, A Mbodji, B Diop, YFO Gaye, AO Lemine, CT Cisse

Gyneacology and Obstetrics Department, Ouakam Military Hospital, Senegal

*Corresponding author: MM Niang, Cheikh Anta Diop University of Dakar, Senegal

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Abstract

Objective: To specify the epidemiological, clinical, therapeutic and prognostic aspects of the genito-urinary prolapse performed at Ouakam military hospital.

Material and Methods: This was a retrospective and descriptive study of all cases of genito-urinary prolapse performed at Ouakam military hospital between 2004 and 2014.

Results: During the study period, we collected 72 cases of genito-urinary prolapse. The epidemiological profile of the patients was a 61 years old woman, menopausal (93%), multiparous (average parity = 6) with a history of macrosomia deliveries (10%). Three patients had previously had a prolapse treatment. The descent of the organ most often involved two stages (48%) and was associated in 8 cases with stress urinary incontinence (11.1%). The surgery was done vaginally for all patients. Sixty-seven patients (93%) had a total hysterectomy. The intervention lasted on average 74 minutes [30-150]. No surgical incidents were recorded and the follow-up was often simple (98.6%). The duration of hospitalization was on average 3 days. Only one case of recurrence was noted and one patient presented secondary urinary incontinence.

Conclusion: Genito-urinary prolapse is pathology of the elderly woman that often involves several stages. In our context despite the use of autologous tissues in surgical management the prognosis is relatively good.

Keywords: Prolapse; Vaginal surgery; Military hospital ouakam

Introduction

Genital prolapse, which corresponds to the collapse of one or more organs of the pelvic cavity with or without procession of the organs of the small pelvis, is a frequent problem in women. The diagnosis is clinically easy and does not require further tests. The incidence of this condition is underestimated in our regions because of the long consultation time, the lack of qualified personnel for the diagnosis and management of these cases, and even the lack of consultation with patients at home, limited resources and lacking access to the health facility. Different studies have investigated the prevalence of genital prolapse in the general population which was very different depending on whether a clinical examination was used with the Baden classification or the Pelvic Organ Prolapse (POPQ) classification. The management of genito-urinary prolapse remains primarily surgical with surgery that can be done either vaginally, or abdominally by laparotomy or more and more laparoscopy. Reconstructive surgery is done either using synthetic materials or with autologous tissue but this exposes to a much greater risk of recurrence as demonstrated by several studies. The purpose of this study was to specify the epidemiological, clinical, therapeutic and prognostic aspects of genito-urinary prolapse surgically managed at Ouakam Military Hospital.

Patients and Methods

This was a retrospective and descriptive study of all cases of genito-urinary prolapse operated at the military hospital of Ouakam over a period of 5 years from January 1st, 2010 to December 31st, 2014. We included all patients admitted for urogenital prolapse and whose management was surgical.

We noted the epidemiological characteristics, the mode of management, the complications and the prognosis in these patients. The data was recorded and analyzed using the Microsoft Excel 2011 software.

Results

Epidemiological and socio-demographic characteristics

The average age of the patients was 61.1 years with extremes of 24 and 86 years. The 50 to 70 age group was the most represented (72.3%). Only three patients in our series had an age less than or equal to 40 years, a frequency of 4.2%. At the time of the diagnosis of genital prolapse 66 patients were post-menopausal, a frequency of 91.7%. The average parity was 6.85 with extremes ranging from 0 to 14. The large multiparas with parity 6 or higher accounted for 62.5% of the patients in our study. In our cohort 13.9% of patients had a history of obstructed labor with 9.7% who had previously had

Table 1: Patient characteristics.

Parameters	Average (years) / Frequency (%)	Extrêmes
Age (years)	61,1	0 et 14
Parity	7	0 et 14
Period of genital life		
- Genitalactivity	8,3	
- Menopause	91,7	
Delivery		
- Normal	86,1	
- Dystocique	13,9	

Table 2: Characteristics of the surgery.

Caractéristiques de l'intervention	Effectif	Fréquence (%)
Anterior time		
- Plication of Halban's fascia	50	89,2
- Marion Kelly's technique	3	5,3
- Bologna's technique	3	5,3
Middle time		
- Hysterectomy	61	98,4
- Richter's technique	1	1,6
Posterior time		
- Plication of the pre-rectal fascia	15	50
- Posterior colpoperineorrhaphy	11	35,4
- Myorrhaphy of levator	5	14,6

a fetal macrosomia. It should be noted that 5 patients had previously undergone surgery, within three cases a history of prolapse cure, in one case a history of vaginal hysterectomy and a patient who had previously had a myomectomy.

Clinical features

Clinical evaluation of prolapse was done with the Baden and Walker classification. In order of frequency, two floors were reached in 28 cases, a frequency of 38.9% followed by an attack of three floors in 23 patients, a frequency of 31.9%. Only one floor was involved in 19 patients, a frequency of 26.4%. A correlation was found between the number of floors reached and the average age of the patients at the time of diagnosis with a much higher average age among the patients with all three floors reached. Thus, cystocele was present in 56 patients, a frequency of 77.8% and was most often grade 3 (75%). Rectocele was found in 31 patients, a frequency of 43.1% and was most often grade 1 (45%) (Table 1). Stress urinary incontinence was associated with this genital prolapse in 8 patients (11.1%). As part of the pre-operative evaluation, a cervico-vaginal smear (FCV) was performed in 20 cases with 5 abnormal results.

No correlation was found between parity and the number of floors involved, or between the number of floors involved and the history of obstructed labor.

Therapeutic aspects

In our series the management had been surgical for all patients with the vaginal route.

For the anterior time, a plication of the Halban fascia was performed in 50/56 cases of cystocele (89.2%). The techniques of Bologna and Marion Kelly was realized in 3 cases for each one.

For the mean time, a vaginal hysterectomy was performed in 61/62 cases and in one case a conservative surgery type Richter surgery had been done. It should be noted that 4 hysterectomies had been performed without damage of the middle floor; these cases were elderly patients and there was no desire for maternity.

For the posterior time, the management consisted in a plication of the fascia pre-recti for the half of patients (50%), followed by a posterior colpoperineorrhaphy (35.4%) (Table 2).

The operative time was on average 73 minutes with extremes of 30 and 150 minutes. No incidents were reported. The duration of hospital stay was on average 3 days and a half.

In follow-up, nearly one-quarter of patients were lost to follow-up. For the one who was still followed only one recurrence was reported (1.38%) after 24 months and a patient had secondarily presented a urinary incontinence.

Discussion

Epidemiological and socio-demographic aspects

Genital prolapse is pathology of the elderly woman whose real incidence is unknown in our countries because of the few studies of large cohort dealing with this pathology. In Mali, in 2010, Coulibaly [1], found a hospital frequency of 3.5% which is comparable to the results of Timothé [2], which found a frequency of 2.5%. In European studies Laurence found in 2008 a frequency of 6.3% lower than the results of Slicker [3], which found rates of 11.4%. This higher prevalence in European studies could be explained by the fact that in our developing countries the number of consultants is lower than what is found in these countries. In our study, all cases of prolapse were not included; these were the cases that required surgical management.

The average age of our patients was 61 years; it is superior to Sidibé's results which was 36.8 years old. This significant difference shows that genital prolapse is a disease that can affect women at all ages. However, the prevalence increases with age up to 50 years and then remains stable. Tegerstedt reports the following rates: 4.1% between 30 and 39 years and 6.2% between 40 and 49 years [4]. Nygaard found lower prevalence: 1.6% between 20 and 39 years, 3.8% between 40 and 59 years [5]. Conventionally known risk factors such as age, parity or obstetric trauma were found in our study with a relatively high average age at diagnosis and 13.9% of patients with a history of obstructed labor. However, these factors are no longer sufficient to explain the genesis and evolution of genito-urinary prolapse. Bump and Norton [6], divide the risk factors for genital prolapse into predisposing factors, decompensating factors, stimulating factors and promoters. With regard to predisposing risk factors, a family history of genital prolapse (maternal involvement) is a risk factor for the occurrence of prolapse in the offspring. Recent studies have demonstrated this relationship [7]. Ethnically, an epidemiological study in 2007 found that North American women had a higher risk of POPs among Caucasians compared to African-Americans [8]. Anatomical differences have been found to explain

these ethnic variations: a small pelvis in farican women or ultrasound differences in thickness of the puborectal muscle. Among the incentives, multiparity is often incriminated [4].

Clinical aspects

In our study, 77.8% of cystoceles and 43.1% of rectoceles were found. The middle floor was reached in 62 cases, a frequency of 86.1%. This was different from what was found in the literature with Versi who found 51% of cystocele, 27% of rectocele and 20% of hysterocele. Handa found 24.6% of cystocele, 12.9% of rectocele and 3.8% of hysterocele and Dietz 73% of cystocele, 65% of rectocele and 23% of hysterocele [3]. This difference could be explained by the higher age at diagnosis in our study. In fact, a correlation was found between the age at the time of diagnosis and the degree of impairment with a greater frequency of attaining the three floors at that age. Stress urinary incontinence was associated with the genital prolapse in 8 patients (11.1%). The proportion of women with genital prolapse describing stress urinary incontinence varies from one author to another (3.7 to 40%) [9]. But it is traditional to say that the pelvic effect of genital prolapse masks, for many patients, these leaks to the effort. An intraoperative urodynamic assessment would distinguish true urinary incontinence from urinary incontinence and bladder instability resulting from prolapse.

Therapeutic aspects

Surgical management consisted of a vaginal surgery using autologous tissue. Conventional vaginal prolapse surgery incorporates two complementary surgical principles with "suspension" techniques similar to high-path techniques of suspending vaginal tissue to a ligament by a wire. The other large family of techniques is based on a theoretical principle of "support" and consists of the use of autologous tissues that are re-tensioned under the prolapsed viscera. It is thus possible to make plications of the vesical and pre-rectal fascias. These two main principles have been applied in our study with the anterior time a plication of the fascia of Halban which was performed in 89.2% of cases and the posterior time a plication of the fascia pre-recti (50%) and a posterior colpoperineorrhaphy (35,4%) were realized in almost all the patients. But nowadays there is the problem of the use or not of prothetic equipment. Many authors have attempted to evaluate the predominance of either technique. A Cochrane review included all randomized trials published up to February 2009 including surgery for female genital prolapse [10]. The use of vaginal prothetic reinforcement implants for the cystocele treatment seems to reduce the risk of anatomical recurrence but the improvement of the satisfaction, the quality of life and the rate of reintervention could not be demonstrated. Other studies also confirmed that, these were the N'Guyen studies in 2008 that had 55% success in the group of patients in whom a prothesis had been used versus 89% for the control group as well as Sivaslioglu in the same year which found 72% against 91%. In our series, the recurrence rate was relatively low after a decline of at least 24 months with a recurrence rate of 1.38%. This low level could be explained by the large number of patients lost to follow-up and for whom the anatomical benefit could not be appreciated. This could also be explained by advanced age (64 years) at the time of diagnosis and management. But these techniques are still under evaluation and cannot be considered as systematic indications in simple cases of

genital prolapse [10,11]. The report of the High Authority of Health (HAH) published in July 2007 on the "Evaluation of reinforcement implants for the treatment of female stress urinary incontinence and for the treatment of prolapsed pelvic organs of women" concluded that "the current data in the literature do not show the interest of these implants in the management of genital prolapse by vaginal route", but that they could present "an interest in second intention after failure of a surgical procedure, or if a particular clinical element raises the risk of a high risk of recurrence" [12].

More recently, in November 2009, HAH published a guide to "Good Use of Health Technologies: What Reinforcement Implants to Treat Female Pelvic Organs Prolapse"? Which recalls the need for comparative prospective studies between conventional vaginal surgery techniques and these implants [13]?

Thus, even if the use of vaginal protheses is preferred for the management, the indications for its use should be better evaluated according to the socio-economic context, the age of the patient and the patient degree of impairment.

References

- Coulibaly Y, Ouattara Z, Konate M, Sanogo M, Sinayogo B, Ouattara K. Cystocele : aspects cliniques et thérapeutiques dans le Service d'Urologie du CHU Gabriel Tour2. Mali Médical. 2010; Tome XXV N°2: 3.
- Thimoté D. Contribution à l'étude des prolapsus génitaux: bases anatomiques, étiopathologiques et indications thérapeutiques à l'hôpital Gabriel Touré : à propos de 63 cas. Thèse de médecine, Bamako. 1987; N° 47.
- Lousquy R, Costa P, Delmas V, Haab F. État des lieux de l'épidémiologie des prolapsus génitaux. ProgUrol. 2009; 19, 13: 907-915.
- Tegerstedt G, Maehle-Schmidt M, Nyrén O, Hammarström M. Prevalence of symptomatic pelvic organ prolapse in a Swedish population. IntUrogynecol J Pelvic Floor Dysfunct. 2005; 16: 497-503.
- Nygaard I, Bradley C, Brandt D. Pelvic organ prolapse in older women: prevalence and risk factors. ObstetGynecol. 2004; 104: 489-497.
- Bump RC, Norton PA. Epidemiology and natural history of pelvic floor dysfunction. ObstetGynecolClin North Am. 1998; 25: 723-746.
- Jack GS, Nikolova G, Vilain E, Raz S, Rodriguez LV. Familial transmission of genitovaginal prolapse. Int Urogynecol J Pelvic Floor Dysfunct. 2006; 17: 498-501.
- Rortveit G, Brown JS, Thom DH, Van Den Eeden SK, Creasman JM, Subak LL. Symptomatic pelvic organ prolapse: prevalence and risk factors in a population-based, racially diverse cohort. ObstetGynecol. 2007; 109: 1396-1403.
- Hermieu JF, Le Guilchet T. Mise au point: Prolapsus génital et incontinence urinaire. J Med Liban. 2013; 61: 61-66.
- Boulanger L, Lucot JP, Giraudet G, Bot Robin V, Rubod C, Collinet P, Cosson M. Le prolapsus génital: État des lieux de la chirurgie par voie vaginale. J Med Liban. 2013; 61: 48-54.
- Sand PK, Koduri S, Lobel RW, Winkler HA, Tomezsko J, Culligan PJ, et al. Prospective randomized trial of polyglactin 910 mesh to prevent recurrence of cystoceles and rectoceles. Am J ObstetGynecol. 2001; 8.
- HAS. Evaluation des implants de renfort pour le traitement de l'incontinence urinaire d'effort féminine et pour le traitement du prolapsus des organes pelviens de la femme. 2007.
- HAS. Bon usage des technologies de santé: quels implants de renfort pour traiter le prolapsus des organes pelviens de la femme. 2007.