

# Prognosis of 148 New Cases of Female Genital Fistula in a Multicentric Study in Niger

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## Abstract

**Introduction:** We report anatomopathological and treatment results of new cases of obstetrical female genital fistula in main to determine the prognosis.

**Methodology:** Multicentre prospective study over 15 months (January 1st, 2016 to March 31st, 2017) in 5 national centres of female genital fistula treatment. Patients were in all age group. Anatomopathological types were urogenital classified simple, middle and mixte (association of urogenital and recto genital). The methods of treatment were surgery and trans urethral vesical probe. We observed treated patients during 3 months. **Results:** 148 new cases collected. The study revealed 47.15% of urogenital fistulas were vesico-vaginal and urethro-vaginal (25.71%). 3 cases of rectovaginal fistula including 2 cases in the lower third of the rectum and one in the upper third, 141 patients were treated. The results gave 35 cases treated by trans uretero-vesical probe cured and dry, those by surgery were continent and dry (71.62%) but 23 (15.54%) treated but not dry, 12 (4.10%) FGF were not closed (tTab5) 7 cases not treated, one referred to urology service, one patient died before treatment and 5 perdu of view. **Conclusion:** Obstetric fistula remains a serious public health problem in Niger. FGF happened in all age old because of non skilled pre- and per-natal care particularly in rural area. Treatment could be improved but political prevention must be the rule.

## Keywords

FGF, Treatment, Prognosis, Niger

## 1. Introduction

Rare in industrialized countries, female genital fistula (FGF) remains as a serious

public health problem in underdeveloped countries where the health infrastructure is insufficient or non-existent as in sub-Saharan Africa Countries, South Asia and some Arab states. FGF is generally consequence of obstructive delivery labor. It deserves appropriate treatment because spontaneous closure is rare. The appropriate treatment will depend on various factors including the size and location of the fistula, the quality of the surrounding tissue, and the surgeon's experience. Therapeutic management is often difficult, sometimes disappointing (success 80% - 95%) [1]. We report the therapeutic results of 148 new FGF cases [2] in order to evaluate the prognosis.

## 2. Methodology

Multicentre prospective study over 15 months (January 1st, 2016 to March 31st, 2017) in 5 national centers for the therapeutic management of female genital fistula. Data were collected from focus groups, observations and pre-established individual survey form and hospital record. Anatomopathological type of FGF was defined simple if tissue around was soft and the hole not enlarged, it was middle if tissue around fistula was soft but enlarged, complex if mixed urogenital and rectal or tissue fibrosed (**Table 3**) The treatment was surgical or non surgical (by transurethral vesical probe) or abstention. We observed treated patients during 3 months, the prognosis involved five elements fistula closed and dry, closed but stress incontinency, not closed, not treated, vital issue A total of 141 cases were treated, all ethic consideration respected.

## 3. Results and Comments

As we reported in previous article [2] the patients were 15 - 19 years old (40%) of cases, married before 16 years old (55.4%), any scholarship (89.2%) and 77.2% women lived outside the matrimonial home, they lived in rural area (96%), 47.3% had the fistula at first delivery and 5.4% of recurrence cases, The duration of delivery labor was over 24 h (71.6%) and finished in health facility (95.3%) by vacuum extractor (33.8%), Caesarean section (23%), by laparotomy for uterine rupture (10.8%). The stillbirths were 85.1%.

The study revealed that 47.15% of urogenital fistulas were vesico-vaginal and urethro-vaginal (25.71%). 3 cases of rectovaginal fistula, including 2 cases in the lower third of the rectum and one in the upper third. There were 5 association of rectovaginal fistula and urogenital fistula including 3 cases the same anatomical type recto-vaginal fistula of the upper third of the rectum, one of the middle third of the rectum and one of the lower third of the rectum. For the other two cases, there was a rectovaginal fistula of the upper third of the rectum associating respectively a juxta-cervical fistula and a vesico-vaginal fistula. (**Table 1, Table 2**), the vaginal flexibility was noted in 91.22% of cases. Vaginal flexibility is a best condition for the success of surgery. If diagnosed in the early postpartum days [3] recommended a conservative approach for small fistula, In this case, drainage is continued for three weeks and the fistula was then reevaluated. If the

**Table 1.** Type of FGF by old age group.

Type of FGF	Age							Total
	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	≥40		
recto-vaginal	1	1	0	1	0	0	3	
uro-génital	56	26	18	14	19	7	140	
Mixte	1	1	1	1	1	0	5	
Total	58	28	19	16	20	7	148	

**Table 2.** Anatomic classification of urogenital FGF.

Anatomic Classification	N	%
Uretro vaginal	36	25.71
Para uretral	3	2.15
Vesico vaginal	66	47.15
Trigonal	4	2.85
Juxta cervical (blader)	11	7.85
Intra cervical (blader)	2	1.42
Circonfereencial	14	10
Uretero vaginal	4	2.85
Total	140	100

fistula has decreased in size, in case of only urovaginal cases, a continuous trans-urtral vesical probe drainage test for an additional three weeks may be beneficial with a high rate of spontaneous closure. If there is no change, it is unlikely to close the fistula spontaneously, surgery is indicated [3] we did not failure in our cases. Persistent, large, or complex fistulas are best treated by surgery. [3]-[9]. A total of 141 patients were treated at first time before 50 days following diagnosis of FGF (Table 3, Table 4). We treated by prolonged (three weeks mean) drainage using a trans uretral vesical probe 35/141 (24.82%) as early diagnosed after vaginal or cesarian in obstictive labor delivery. Surgery treatment concerned 106/141 (75.18%), Rachis anesthesia was given for all patients and vaginal way surgery was exclusive. Any incident happened during the surgery, 7 patients were not treated because of local damage (important (vaginal fibrosis, diagnosis at end of data collection). So 91.49% patients were cured. All patients (35/35) treated by trans uretralvesical probe and 75.18% (106/141) by surgery, were cured dry and continent but 23 (15.54%) were cured but not dry, 12 (4.10%) were not closed. The treatment failed because of complex mixte FGF (Table 5). Five patients were lost of view, one patient referred to urology service for complex high level FGF and one patient died by acute anemia and denutrition before treatment; Despite the great progress by audacity and ingenuity of the surgeons, the closing of an obstetrical FGF continues to be serious problems from the 17th century to the present days, surgery is one of the most difficult and tough

**Table 3.** Level of complexity of FGF.

Complexity level	N	%
Simple	69	46.62
middle	35	23.64
Complex	44	30
Total	148	100

**Table 4.** Delay before 1rst cure (number of days).

Delay/Days	N	%
1 - 7 days	11	10.28
8 - 14 days	31	28.98
15 - 21 days	21	19.62
22 - 28 days	14	13.08
29 - 35 days	12	11.21
36 - 42 days	6	5.60
43 - 49 days	3	2.80
≥50 days	9	8.41
Total	107	100

**Table 5.** Cure results.

Result	N	%
FGF closed and continent	106	75.18
FGF closed with effort incontinent	23	16.31
FGF not closed	12	8.51
Total	141	100
No treatment	7/148	4.73

surgery [3]-[9]. This is due to the narrowness and depth of the operative field which limits the movements of the instruments. Long and tiring intervention is repeated with numerous failures and frequent long hospitalisation. This situation makes the management of the FGF compelling [2]-[7]. In this study, cases were treated by surgery (82.24%) at first intervention 14.95% at second surgery and 3.73% third time. For Idi. [1], Niger, 2005 57.4% of cases were cured at first operation.

Prognosis outcomes after a mean follow-up of 3 months 70.27% FGF were closed and dry, 15.54% closed with stress urinary incontinence and 9.46% fistulas were not closed. On the other hand, 7 patients (4.73%) had any treatment (5 were lost to follow-up and 1 died by acute anemia before any treatment and a case of upper level uretero-vaginal fistula referred in urology service).

A past study [1] in Niger in 2005, 73% of patients were dry, 14% fistula closed

but remained incontinent, 5% had open fistula, 2% died and 7% were lost to follow-up.

#### 4. Conclusion

Obstetric fistula remains a serious public health problem in Niger. FGF happened in all age old group, particularly in rural area. For simple cases transurethral vesical probe is good approach in early diagnosed cases, but prevention by prenatal and skilled delivery assistance must be the rule.

#### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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