# DOES THE AETIOLOGY OF OBSTETRIC FISTULAE DIFFERS IN AFRICAN COUNTRIES? A STUDY IN THE DEMOCRATIC REPUBLIC OF CONGO.

## Hypothesis / aims of study

It is generally accepted that obstructed labour and poor access to professional perinatal care are the main causes of obstetric fistulae. In many African countries patients in rural areas do not have access to healthcare because of transportation and/or financial reasons. Often referral is also delayed by local beliefs or traditional practices. The aim of the study was to identify the aetiology of obstetric fistulae in women attending a fistula program at a district hospital in the Democratic Republic of Congo and to compare them to the Ethiopean data. In this country the healthcare systems allows access to local dispensaries with trained doctors, but financial constraints and traditional beliefs still impair the delivery of good healthcare to a large proportion of the population. Secondary aims were to gather information on the outcome of the fistula repair and on their social reintegration.

## Study design, materials and methods

Women with vesicovaginal fistulae were recruited by local healthcare workers, local radio and television and trough announcement during religious services.

Before entering the fistula treatment program history and current health status were noted and a clinical vaginal examination was done to confirm the presence of a vesicovaginal fistula. Fistulae were classified according to the Waaldijk classification. All the women agreed to be contacted at regular intervals (3 months and 1 year) after their fistula repair by a trained fistula nurse to complete a self-constructed questionnaire on the outcome of the fistula repair and on their social status ( marital status, reintegration in the community etc..)

## <u>Results</u>

Fifty three women were identified between October 2007 and march 2008.

Their mean age was 33,3y (range 20-72), mean length 146,7cm(140-159) and mean weight was 46,4kg (37-86). The mean duration of the labour was 2,1 days (1-4) and 98% were stillbirths. They lived with a fistula for a mean of 5,1y (5 months-12 y). The mean parity was 3,2 (1-9) and of those 1,9 (0-7) children were still alive.

41 patients (77%) had a caesarean section. One patient had a uterine rupture (1,8%), 2 had placental problems (3,7%) for which surgery was undertaken. Of the remaining patients 6 had vacuum extractions, 3 had a forced vaginal delivery and 1 had a vaginal delivery after a previous caesarean section. 21(40%) were abandoned by their husband and were being taken care of by relatives or parents. 9 (17%) were the oldest of their brothers and sisters, their important social role in the African family being compromised by their problem.

Sofar 23 patients have been operated. In all cases a transvaginal approach was used. The catheters were left in place for 10-21 days. Of those 23 patients, 22 were available for follow-up. One patient could not be found back until now.

The figure below gives the classification and the outcome. The closure of the fistula was assessed 3-5 days after the removal of the catheter by clinical examination. The continence status was assessed by the nurse at 3 months. The numbers left of the slash indicate the number of successful fistula closure at 3 months. The asterix indicates the number of patients with a closed fistula but with remaining stress and/or urgency incontinence.

In general 78,3% of the fistula were closed successfully (100% for those with an intact urethra, 70% for those with a damaged urethra). Stressincontinence was present in an older lady (64y) with a type I fistula and in 2 patients with a large IIAa fistula. A sling procedure will be performed in a second stage.

At 3 months 5/21 women who were divorced had returned to their husband. 18/23 worked as farmers and continued to do so. Of the remaining 5, 2 started a small business.

All confirmed that their social status and financial status was improving after their fistula repair.

The detection, surgical treatment and follow-up of these patients is an ongoing process.

		> 2cm	2-3cm	4-5cm	>6cm	
I	urethra intact	3/3	2/2	1*/1	0	6/6
11	damaged urethra					
A	partial urethral destruction					8/9
	a not circumferential	5/5	1/1	2**/2	0	8/8
	b circumferential	0	0	0/1	0	0/1
В	complete urethral destruction					4/8
	a not circumferential	0	0	0	0/1	0/1
	b circumferential	1/2	0	1/2	0	2/4
III	complex fistula	0	1/1	1/2	0	2/3
		9/10	4/4	5/8	0/1	18/23

## Interpretation of results

1) The demographic and personal data of the patients in this region of Congo differ from those reported in the literature on fistulae in Ethiopia<sup>1,2</sup>. Congolese patients were older (mean age of 20y vs 33,3y) and only a minority of them gave birth at home (7,5% vs 45%). The duration of labour was shorter (2,1 days vs 3,8days). These data indicate that Congolese women have an easier access to health care. They are able to undergo a caesarean section, but this is often delayed since most of them deliver a dead baby. These data also indicate that the local staff is not trained on the early detection

and treatment of fistulae, since all women returned home after their caesarean without being examined for the presence of a fistula or without having been informed about this eventual complication.

2) 93% of the fistulae with <4cm diameter could be closed vaginally and continence was restored. Fistula of 4cm were closed successfully in 55,5% and continence was achieved in 66,7%.

## Concluding message

Obstetric fistulae continue to form a challenge in Congo, despite the organisation of the local healthcare with a still difficult, but reasonable accessibility for the patients. More data on patient profiles and the needs to improve the perinatal care are necessary. Delayed referral, ignorance but especially poor training of the local staff in the prevention, diagnosis and management of fistulae make that these women went home after their caesarean section without a baby, but with a fistula.

Next to surgical support by foreign and local teams, an effort has to be made to increase the level of knowledge and skill of the local nurses, midwifes and doctors. A decentralised approach might be more indicated for this than the creation of specialised fistula centres.

#### **References**

- 1. Ethiop Med J (2004) 42; 9-16
- 2. J Obstet Gynaecol Can (2008) 30; 44-50

Specify source of funding or grant	Solidarrity Fund for African Women (SOLFA, Belgium)			
Is this a clinical trial?	No			
What were the subjects in the study?	HUMAN			
Was this study approved by an ethics committee?	No			
This study did not require eithics committee approval because	Observational study of consecutive fistula patients whitouth any experimental treatments. Patients consented to be followed up by telephone interview or a visist from a nurse after having left the hospital.			
Was the Declaration of Helsinki followed?	Yes			
Was informed consent obtained from the patients?	Yes			