

GENITOURINARY FISTULA EXPERIENCE IN SIERRA LEONE: REVIEW OF 505 CASESHypothesis / aims of study

Obstetric fistulas resulting from obstructed labor remain a common cause of significant morbidity in women in sub-Saharan Africa. We reviewed an experience with genitourinary fistulas resulting from birth trauma in the country of Sierra Leone to determine factors predictive of a successful operative repair.

Study design, materials and methods

Five hundred and five operative repairs of genitourinary fistula were completed at two centers in Sierra Leone from 2004 to 2006. Statistical analysis of demographics, fistula characteristics, outcomes and surgical complications was performed.

Results

Primary repairs, defined as the patient's first repair, accounted for 68% of the procedures, with 92% classified as vesicovaginal fistula alone without a rectal or urethral component. Only 56% of women were deemed to have an intact bladder neck or urethra at presentation and 68% were diagnosed with moderate to severe fibrosis surrounding the fistula. Average age at time of repair was 29.4 years with mean fistula duration of 62 months. On univariate analysis, parameters which demonstrated significance for primary operative success were age at occurrence ($p = 0.0192$), pregnancy at which the fistula occurred ($p = 0.0061$), fistula location ($p < 0.0001$), total surface area ($p < 0.0001$), urethral status ($p < 0.0001$), and extent of fibrosis ($p < 0.0001$). On multivariate analysis, the only parameter which correlated with successful repair was the extent of fibrosis (odds ratio 2.04 for moderate fibrosis and 3.7 for severe fibrosis).

Interpretation of results

In contrast to other fistula series, women with prior pregnancies showed significantly improved outcomes when compared to the primigravida fistula patients. The most profound factor correlating with positive operative outcome was the extent of fibrosis surrounding the fistula.

Concluding message

Genitourinary fistula as a result of prolonged obstructed labor is a cause of considerable morbidity in sub-Saharan Africa, including Sierra Leone. Despite significant social and patient dilemmas, primary repair of midvaginal fistula of moderate size can be performed with a high degree of success. These data are important to help predict the likelihood of a successful repair and to assist in selecting women for the appropriate surgical procedure.

<i>Specify source of funding or grant</i>	None
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	No ethics committee was present at the participating institutions at the time of the study.
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes