Special Contribution

The Obstetric Fistula: A Major Public Health Problem Still Unsolved

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Abstract: Vesicovaginal fistulas that result from the trauma of obstructed labor cause a massive problem worldwide in developing countries. An assessment of the problem and a call for action are presented in this paper.

Keywords: Fistula; Incontinence; Maternal morbidity; Obstructed labor; Public health concern; Vesicovaginal fistula

Introduction

The vesicovaginal fistula (VVF) is as old as mankind and has been a constant source of misery to the women affected [1-6]. The main cause in over 85% of cases is obstructed labor which is not relieved in time by a cesarean section. Pressure necrosis of the bladder and anterior vagina wall develops as these are compressed between the fetal skull and the maternal symphysis. There is a frequent combination with other intravaginal and extravaginal lesions. The intravaginal lesions are rectovaginal fistula (RVF), loss of pelvic floor muscles and vaginal stricture or stenosis. Both pelvic nerve damage and anatomic tissue loss from necrosis occur. The extravaginal signs of obstructed labor are peroneal nerve paralysis, pressure ulcers over prominent bones such as the sacrum, and even cachexia.

The trauma of unrelieved obstructed labor is such that most of the mothers die and only the ‘lucky’ ones survive, at the price of a fistula and a stillborn infant. Then the real trouble starts, as the social implications are far-reaching. Because of the continuous dribbling of urine down their legs, the wetting of their clothes and the accompanying offensive smell, most communities consider these women as outcasts. If no cure is obtained within a short period of time their husbands divorce them, and they end up as cheap prostitutes when young and as beggars later on. Sometimes they are not even allowed to live in the village, but have to stay outside, as people think the condition is contagious.

Though exceptionally the fistula may heal spontaneously, with or without the help of an indwelling bladder catheter, the majority of VVF patients can only be helped, if at all, by surgical intervention. Even if the fistula itself has been closed, there may remain some other serious problems such as urinary (stress) incontinence, vaginal stenosis or even atresia, and infertility.
Only if all these problems can be solved can the patient be restored to a normal social life.

As a definite solution to VVF cannot always be found, it is clear that some patients must live socially and physically crippled until they die.

Magnitude and Analysis of the Problem

Though now rare in the industrialized world, the VVF is still very prevalent in the developing world, where it constitutes a major public health problem. Unfortunately, only very few people are aware of this. 140 years after James Marion Simms carried out his initial work in the surgical correction of the obstetric fistula, from which modern gynecology started, much has been forgotten despite a high prevalence in developing countries worldwide.

From the authors’ experience in Northern Nigeria, where even 700 repairs a year are not sufficient to cope with all the VVF patients presenting, the incidence rate can be calculated at 1–2 per 1000 deliveries where the mother survives in situations where there is no easy access to a functioning obstetric unit.

The annual worldwide incidence is estimated at a minimum of 50,000–100,000 new patients. As only a minority receive surgery, the prevalence is at least 500,000 patients in need of an operation; their actual number may be over two million.

To understand the problem in the developing countries, there is obstruction at every level of labor management, viz obstruction of diagnosis, obstruction of a decision about what to do with the patient, obstruction in fund-raising for transport and medical care, obstruction of transport to get the patient to a hospital, and obstruction at secondary and tertiary health care centers to organize a cesarean section.

The Future

Though the VVF is preventable, it will be a major public health problem for many years to come, since the funds to set up an adequate network of good obstetric/gynecologic care throughout the world are not available. It will take a long time to change sociocultural patterns and to make the industrialized world aware of this problem, and the prevalence will probably increase as the population in the developing world is exploding rapidly, with no concurrent increase in health facilities.

As VVF is one of the major public health problems where both the prevention and the treatment are highly specialized, i.e., surgery, it cannot be solved within the primary health care system, making it necessary to rely upon secondary and tertiary health care providers. The only role the primary health care provider can play is to detect risk factors in pregnant women, diagnose obstructed labor, and then take action to get a cesarean section performed as soon as possible.

As VVF is a typical problem of the developing world, it can only be tackled within the limited resources of that world, with some help from the industrialized world.

Recommendations

From a public health viewpoint, the following recommendations are made, to have an impact upon an almost hopeless situation:

1. Prevention. Health education to the general public in developing countries by all means of information (radio, television, newspaper, poster, school, antenatal clinic, etc.), that any woman who is in labor longer than 1 day should be brought as soon as possible to the nearest hospital, where a cesarean section can be performed; time and general education must work towards establishing a network of transport and functioning obstetric units.
2. Research. To stimulate more field research in order to compile accurate baseline data, including incidence, prevalence and other regional factors.
3. Rehabilitation. Multiple small low-cost VVF units must be established within the existing health system of the developing countries, where simple repairs can be performed with a minimum of equipment and materials; for complicated fistulas, the existing teaching hospitals can be used. Following a successful repair there is total and spontaneous resocialization of the woman into her own society.
4. Training. Indigenous doctors of the developing countries should be trained so that they know which types of fistula they can handle themselves and which types they need to refer to the teaching hospitals.
5. Financing. As the developing countries have limited resources, it must be a joint venture between the respective governments, the voluntary aid organizations and the governments of the industrialized countries in the form of bi- or multilateral agreements.
6. Worldwide attention. This is a task that should involve the World Health Organization’s Program for Safe Motherhood, the United Nations Fund for Population Activities, and other organizations as well.
7. Voluntary aid. The founding of an Obstetric Fistula Relief Association to deal exclusively with these problems is long overdue.
8. Backing of patients. This will be a problem, as expertise in how to handle VVF under primitive conditions within a low budget ($20–25 per operation for all anesthesia/surgery materials) is very scarce. A team should be formed which could be used for establishing VVF units for both service and training.

Conclusion

There are at least 500,000 VVF patients in the world seriously suffering physically, psychologically and socially, for whom little is being done. It is time to start giving them the attention and care they deserve.