

Original article

Association of birth trauma with genital prolapse – a study of hundred cases

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Abstract

Objective : Genital prolapse is a common gynaecological problem both in developed and developing countries. This spectrum of problem creates a social and economic burden on society of enormous magnitude. The study was conducted to identify the factors which favor to develop genital prolapse

Methods : This Cross sectional descriptive study was carried out during the period from July 2006 to December 2006. The study was conducted on 100 cases, in department of Obstetrics and Gynecology of Bangabandhu Sheikh Mujib Medical University, Dhaka from July to December, 2006.

Results : In the present study, 99% of the deliveries were conducted at home by TBA or by Dai. 42% women had 1-4 and 58% women had 5 or more children. Fifty two percent of the patients had difficult and prolonged labour 20% patients developed prolapse after menopause. 45% women had early resumption of heavy work. 30% patients had chronic constipation and 9% had chronic cough.

Conclusion : Vaginal birth is associated with risk of development of uterovaginal prolapse and risk is increased with number of vaginal birth, mismanaged labour & puerperium.

Keywords : Uterovaginal prolapsed, Aetiological aspects, Birth trauma, intrapartum care.

Introduction

The pelvic floor and its support systems have been a site of keen interest for gynecologists, urologists, surgeons and anatomists. Integrity of this system is needed for the storage and controlled evacuation of urine and faeces along with an accommodation during sudden changes in intra-abdominal pressure and in pregnancy. An intact pelvic floor ensures that all the visceral structures are in their normal positions. Genital prolapse is one of the most common clinical conditions met in the day-to-day gynecological practice, especially amongst the parous women. The entity includes descent of the vaginal wall or the uterus. It is, in fact, a form of hernia. This is very relevant in our country and is one of the frequent causes of morbidity in women. It is responsible for over 20% of all gynecological operations¹. The exact prevalence of prolapse is difficult to determine because the social embarrassment discourages women from seeking medical advice. Some women are asymptomatic and

some are unaware that help is available. It has been estimated that a half of parous women lose pelvic support, resulting in some degree of prolapse and that, of these women, 10-20% seek medical care². In developing countries like Bangladesh, genital prolapse is associated with repeated and mismanaged vaginal deliveries. Vaginal delivery with consequent injury to the supporting structures is the single most important acquired predisposing factor in producing prolapse³. The prolapse is unusual in cases delivered by caesarean section. Reproductive health plays an important role behind the cause and development of prolapse⁵. In this study much emphasis is given on causes and factors related to prolapse. It is hoped that it may help in determining the methods that can be used to minimize genital prolapse.

Methodology

This cross sectional descriptive study was conducted in department of Obstetrics and Gynecology of Bangabandhu Sheikh Mujib Medical University, Dhaka. The study was conducted on 100 cases, from July to December, 2006. Data was collected through the use of prepared questionnaire and by thorough physical examination, for recording all relevant parameters, which was in structured format.

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Study Result

The study was carried on 100 cases of genital prolapse, who attended gynae outdoor and indoor of BSMMUH. The results are presented here in tables or graphs.

Fig-1 : Distribution of patient by age

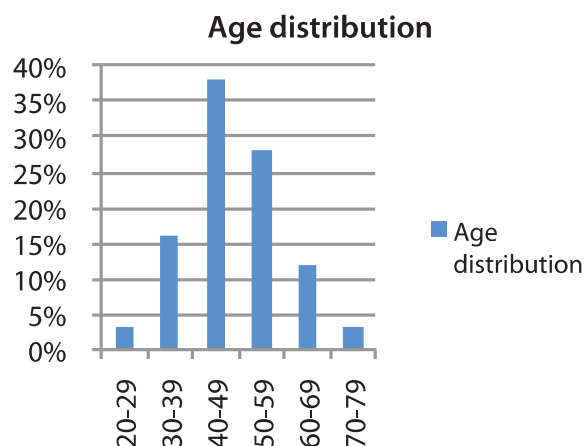


Table-1 : Distribution of patients by Socio economic condition

Income group	No of Patients	Percentage (%)
Low	54	54
Middle	34	34
High	12	12
Total	100	100

Fig-2 : Distribution of patients by Parity

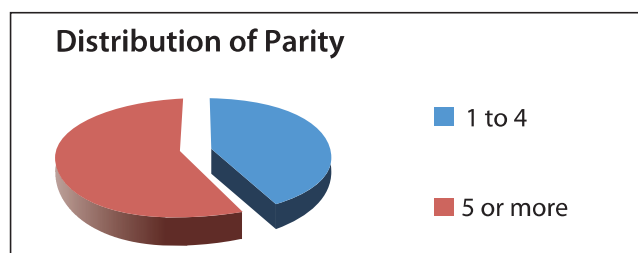


Table-2 : Distribution of patients by conduction of Delivery

Delivery Conducted by	No. of Patients	Percentage (%)
Dai	49	49
TBA	50	50
Doctor	1	01
Total	100	100

Table-3 : Cases with or without difficult labour

Duration of labour	No. of patients	Percentage (%)
Prolonged labour pain and difficult deliveries	52	52
Labour without difficulties	48	48
Total	100	100

Table-4 : Distribution of patient by presenting symptoms

Presenting symptoms	No.	Percentage (%)
Something coming down p/v	100	100
Pelvic heaviness	9	9
Backache	34	34
Urinary symptoms		
Increased frequency	44	44
Burning micturition	38	38
Difficulty in emptying bladder	34	34
Urinary incontinence	20	20
Discharge per vagina	36	36
Total	100	100

Table-5 : Distribution of patients by associated Risk Factors

Risk factors	No.	Percentage (%)
Early resumption of work after delivery	49	49
Lifting heavy weight	45	45
Chronic constipation	30	30
Chronic cough	9	9
Total	100	100

Fig-3 : Distribution of patients by Relation of Prolapse with menopause (oestrogen deficiency) as a risk factor.

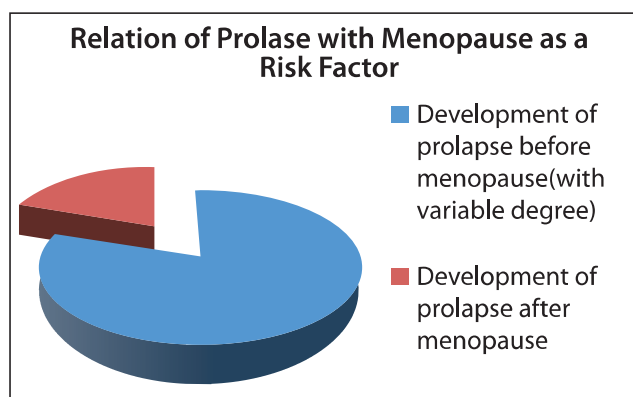


Table-6 : Distribution of patients by degree of anemia

Anaemia	No. of Patients	Percentage (%)
Not anaemia	30	30
Mild anaemia	53	53
Moderate anaemia	17	17
Severe anaemia	0	0

Discussion

In the present study, age of the patients ranged from 20-70 yrs. Highest incidence 38% was found in the age group 40-49 yrs. The incidence is also nearer to incidence in other developing countries^{6,11}, but does not correlate with the age incidence of developed countries like California⁴, where it was shown that peak age incidence is 50-89 yrs. In the developed countries life expectancy is more than developing country again process plays more important role in development of prolapse. In developing country early age incidence is due to early marriage and high parity at a younger age⁸.

In the present study, 99% of deliveries were conducted at home by TBA or by Dai. 99% women were multipara. Fifty two percent of the patients had difficult and prolonged labour, 49% of the patients did not take proper nutrition adequate rest during puerperium instead did heavy household works during puerperium. Early resumption of heavy works before revert back of pelvic organs to their normal anatomical position, is attributing factor in developing prolapse. These findings suggest that there is some mismanagement in conduction of labour and also of puerperium that resulted in development of prolapse¹⁰.

If it considers about the inherent weakness of pelvic supportive tissue, this might have been there. But here the women in this study did not observe any protrusion of tissue per vagina before child birth and 80% of them developed features of prolapse after the first or subsequent difficult child birth, which suggest birth trauma is the main causative factor of developing prolapse of the women⁷. Many patients had aggravation of mild symptom after menopause. Estrogen deficiency in previously traumatized pelvic floor (during child birth), might have cause further weakening of the pelvic supports. Regarding relation of prolapse with menopause, 80% observed protrusion of variable degree before menopause and 20% patients developed prolapse after menopause. In these cases causative factor would be oestrogen deficiency leading to atrophy of pelvic supports⁵.

Associated risk factors like chronic cough was present 9% cases, chronic constipation in 30% cases, heavy works like lifting heavy weights was in 45% cases. All these factors causes chronically increase in intra abdominal pressure attributing to genital prolapse¹².

In the study, genital bulge, i.e. protrusion of tissue per vagina was the commonest symptom, which was 100%. Pelvic heaviness which is earlier symptom was found in 9% cases. Increased frequency of micturation was in 44% cases, burning sensation during micturation in 38% cases, difficulty in emptying bladder was in 34% cases, urinary incontinence in 20% cases. Discharge per vagina and backache were present in 36% & 34% cases respectively. In the study made by Evauf, Prebeuk in Sweden, 15% of patients reported pelvic heaviness, 4% genital buldge and 12% difficulty in defaecation⁹. The incidence of protrusion of tissue per vagina is much lower in this study. This is probably due to conscious patients in the developed countries who seek medical care earlier.

Out of 100 patients, 53% of the patients had mild and 30% had no anaemia. A study in Gambia showed significantly increased odds of prolapse in the presence of moderate or severe anaemia compared with those who were non-anaemic and mildly anaemic⁹. Present study is not consistent with this observation. In this study, most of the patients were from low socio-economic backgrounds, which correlate with the comment by Lukman that under-nutrition which is more pronounced in poor people, as cause of poor tissue tensile strength of the pelvic supporting system may be a possible co-factor in the pathogenesis of pelvic organ prolapse³. Poor socioeconomic conditions also suggest poor maternity service, was the most important social factor for genital prolapse.

Conclusion

Women in Bangladesh constitute a high risk group for genital prolapse because of lack of maternity health service. Maternity care during antenatal, intranatal and postnatal period will provide safe motherhood and good obstetric practice. All these measures will lower the rate of development of genital prolapse. Correction of chronic cough and constipation, avoidance of heavy physical works are also necessary to lower the incidence of genital prolapse. Our government and many non-government organizations are trying to provide maternity health services and updating the training program for skilled birth attendant and it is hopeful that these services will lower maternal mortality and morbidity along with minimizing the incidence of genital prolapse.

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