

Genitourinary Prolapse cases: our experience of managing in a low resource setting.

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Abstract:

Background: Genitourinary prolapse is the herniation of pelvic organ through genital hiatus. It is not a very uncommon finding among perimenopausal and postmenopausal women attending our gynaecology OPD. Some of these patients came for treatment of this condition (moderate to severe degree), while rest were detected on routine gynaecological examination.

Aim and objective: we did a retrospective analysis of these cases to see the sociodemographic characteristic, common predisposing factors and the treatment options available for them.

Result and analysis: Commonest age group of patients with genitourinary prolapse cases in our hospital was between 45-65 years. Majority of them were married at teenage and had their 1st child at teenage. Majority of these women were from poor socioeconomic background and were housewives of a large family or labours in profession. They had to deliver at home in presence of a traditional birth attendant. They did not get adequate rest and nutrition following child birth. Average birth spacing of most of these women was less than 24 months. Commonest clinical presentation of these women was something coming out of the introitus and associates urinary symptoms as cystocele is commonly associated with uterine descent. These were mainly moderate to severe degree of prolapse. They were treated surgically with correction of fascial weakness and removal of uterus. Conservative management is not much useful for these patients.

Key words: Genitourinary prolapse, weak pelvic support, herniation of pelvic organs, epidemiology of prolapse cases.

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I. Introduction

Genitourinary prolapse is the herniation of genital organs through genital hiatus. It is one of the common gynaecological problems that need surgical treatment in all most all of the cases. Prevalence of this condition in the community is difficult to determine as most of the mild to moderate cases do not seek medical care. It usually affects poor community of people where early marriage, teenage pregnancy, lack of family planning practice and delivery by unskilled birth attendant is a common practice. They do not seek medical advice until and unless it hampers their day to day activities or they end up into an embarrassing situation in the society or in the family.^{1,2}

Cause of G-U prolapse is weakness of pelvic supportive tissue (pelvic fascial tissue, pelvic floor and ligaments).³ It may be congenital and/or acquired weakness. There are several predisposing factors leading to this weakness of supporting tissue these are chronic increase in intra-abdominal pressure as in COPD, chronic cough, chronic constipation, prolonged labour, neglected labour (home delivery/trial of labour at home early age of 1st child birth, frequent child birth), multiparity, heavy weight lifting. These are very common scenario among poor socioeconomic group of people. Congenital weakness of the pelvic supportive tissue is due to connective tissue disorder, weakness of pelvic floor muscle or neurological disorders. This condition affects mainly primiparous or nulliparous women. These patients usually present with uterine descent and weakness are in main supportive ligaments (cardinal and uterosacral) of uterus or weakness of the pelvic floor muscle. Majority of genitourinary prolapse cases are found in the developing countries and it is very common among the poor socioeconomic group of people. All most all of the predisposing factors are preventable.³ Our aim is to find out common etiological factors and common clinical presentation among these genitourinary prolapse cases and to see the treatment options available for majority of them.

Material and method:

Total number of new patients we examined in gynae OPD in this two years period was 4255. In this present epidemiological study we collected data from 252 genitourinary prolapse cases managed by us in our hospital from 1st February 2014 to 31st January 2016. We took some demographic data, data of clinical presentation and the different ways we managed them. We took these data from medical records and analyzed its frequency and percentage in the following tables.

Inclusion criteria: All the patients who were diagnosed as genitourinary prolapse in gynaecology OPD and treated accordingly.

Exclusion criteria: Patients who were advised surgery but did not turned up for it.

Following data we analyzed in terms of percentage:

1. Age of the patient
2. Daily physical activity
3. Age of 1st child birth
4. Number of children
5. Average Birth spacing
6. Place of delivery
7. Clinical presentation
8. Different urinary symptoms with prolapses
9. Different types of prolapse
10. Different Management procedures

Result and analysis:

Table 1:- Age group distribution of patients at the time of presentation

Age group of patient	Number N=252	Percentage
<30 years	04	1.58
30-40 years	11	4.36
40-50 years	73	28.97
50-60 years	108	42.86
60-70 years	41	16.27
>70 years	13	5.2

Table 2:- Groups of women with varied physical activity

Regular physical activity	N=200	%
Manual hard work (labour)	59	29.5
Moderate to heavy(domestic)	128	64
Light work (domestic)	12	6
Minimum physical work	01	0.5

Table 3:- Different groups of women with age of their 1st child birth

Age of 1 st child birth	N=252	%
<18	164	65.08
18-20	60	23.8
21-25	19	7.54
26-30	06	2.38
>30	03	1.19

Table 4:- Number of children

Number of children	N=252	%
< 3	14	5.56
3-5	104	41.27
>5	132	52.38

Table 5:- Average birth spacing

Average Spacing	N=160	%
<2 years	96	60
2-3 years	48	30
>3 years	16	10

Table 6:- Place of delivery

Place of delivery	N=252	%
Home	161	63.89
Trial at home & Hospital delivery	58	23.02
Hospital admission with onset of labour pain	33	13.09

Table 7:- Different clinical presentation

Clinical presentation	N=252	%
Mass coming out	201	79.76
Abnormal discharge	51	20.24
Urinary symptoms	210	83.33
Decubitous ulcer	94	37.30
Prolapse with pregnancy	02	0.79
Incidental findings	49	19.44
Difficulty in bowel evacuation	71	28.17

Table 8:- Different urinary symptoms with prolapse

Different urinary symptoms	N=210	%
Incomplete evacuation	190	90.48
Recurrent UTI	25	11.90
Stress incontinence	61	29.05
Retention of urine	06	2.86
Urge incontinence	67	31.90

Table 9:- Types of prolapse

Types	N=252	%
Cysto-urethrocele	218	86.51
Uterine descent	214	84.92
Rectocele	94	37.30
Enterocele	35	13.89
Vaginal vault prolapse(post hysterectomy)	06	2.38

Table 10:- Management of prolapse

Management	N=252	%
Ant.colporrhaphy& PFR	23	9.13
VH &ant.colporrhaphy	127	50.4
VH & anterior &posterior colpo-periniorrhaphy	66	26.19
Sacrospinous fixation	8	3.17
sacrocolpopexy	1	0.4
Sling	3	01.19
TOT	1	0.4
Ring pessary	5	1.98
Kegel's exercise	18	7.14

II. Result & analysis

We took some sociodemographic data, some clinical data and some management related data. We analyzed it then presented it in tables in frequencies and percentage.

It shows that majority of the patients came to us between 40-60 years of their age.

Majority of them were housewives of economically poor family having moderate to heavy load household activity (64%). Women of our study group are mostly getting married early and having their first child before 18 years of their age (65.08%). (Mean age of marriage 18.22, SD-3.27) They had to resume their daily activity with a very short period of rest. They were not getting proper antenatal and postnatal care. These women and their family members were not aware of the benefits of family planning practices. Only 5.56% of women adopted small family norm and 10% women followed average spacing of more than 3 years. (Average no. of children 5.57, SD-1.8).

Because of poor transport facility at odd hours from the remote areas and also because of lack of awareness 63.89% of our study population were forced to deliver at home in presence of unskilled birth attendant. Another 23.02% had to have a trial of labour at home before delivering at hospital.

History of long standing chronic cough and chronic constipation was not elicited clearly in most of the patient's records. Because of the insufficient data regarding chronic increase in intra-abdominal pressure its association with prolapse cases could not be analyzed.

79.76% of the patients came with a complaint of a mass coming out of vagina and 83.33% had urinary complaints, 37.3% had decubitus ulcer and 28.17% had difficulty in passing stool. Out of urinary problems 90.48% women had sense of incomplete evacuation, 11.9% came with recurrent UTI and 29.05% women complaints of stress incontinence. On examination majority were having cysto-urethrocele and uterine descent (86.51%, 84.92%). Rectocele found in 37.3% of cases.

Discussion: Most of the reviews of articles on genitourinary prolapse cases have come to an inference that common causes and contributing factors for this condition are bladder extrophy, collagen defects, race, anatomy of pelvis and genital organs and it's support, birth trauma and denervation, raised intra-abdominal pressure, oestrogen deficiency following menopause and iatrogenic due to lack of preventive measure during pelvic surgery.¹

Few large prospective trials have assessed prevention of prolapse cases these are the following:-

Decreased duration of 2nd stage of labour, decreased duration of labour, timely episiotomy, treatment of increased intra-abdominal pressure. These are primary and secondary preventive measure.¹

Role of hormone replacement therapy is uncertain.¹

Pelvic floor exercises after childbirth may help but is not proved and concomitant procedures like Mc-cal-culdoplasty, Muscovitz technique at the time of hysterectomy may reduce the incidence.^{1,2}

Most of the epidemiological studies on pelvic organ prolapse have shown that this condition is preventable and it could be prevented by increasing awareness on the issues of child birth, place of delivery and cause of increased intra-abdominal pressure.^{1,2,3}

Sociodemographic feature of our study is also showing the similar result. However, history of long standing chronic cough and chronic constipation was not found clearly in most of the patient's records. Because of the insufficient data we could not assessed it as a predisposing factor.

Surgical correction is needed in majority of the cases for restoration of anatomy, relief from symptoms and prevention of complications.

Type of surgeries varies depending upon the site and degree of defects. Along with it age of patient and need to preserve future fertility and associated symptoms are also considered.

In our study we took majority of the cases with moderate to major degrees of defects who were treated surgically. Whereas majority of mild to moderate cases of the community either remain undetected or not treated properly.

According to the site of the defects for cysto-urethrocele for both the central and lateral type of defects we did anterior colporrhaphy per-vaginally by the pubocervical tissue approximation with delayed absorbable suture in interrupted stitches. Reported success rate of this procedure is 97%.^{4,11,12}

Some studies have shown the results of per-abdominal repair through retropubic space and in some cases collagen mesh has been used for extra support. Success rate of this procedure is 85-98%.^{8,9} Although, per-abdomen repair without need for abdominal hysterectomy is not recommended.^{4,5,6,7,8} now-a-days laparoscopic correction of different compartment defects are being done with similar success rate.¹⁰ in case of severe weakness of pubo-cervical fascia synthetic graft or biological graft are used for strengthening it in some studies.¹³

For central compartment defect if the patient is elderly or family completed we did hysterectomy. In a few enterocele cases we did sacrospinous fixation of vault with non-absorbable monofilament suture. But in young patients who wishes to preserve fertility we did sling cervicopexy operation and in post hysterectomy vault prolapse cases we did sacrospinous ligament fixation (unilateral) and sacrocolpopexy in one case. As we are working in a low resource setting it could not afford synthetic mesh for repair and laparoscopic sacro-colpopexy.

Posterior compartment defects are rectocele and relaxed perineum in majority of the cases. Here we did pelvic floor repair and correction in all cases by interrupted stitches with 1-0 delayed absorbable suture. In some studies synthetic mesh is also used for posterior compartment defect.¹⁴ success rate of some studies vary from 60-100%.^{15,16}

So far we treated surgically we had no experience of re-operation. Although, in few cases we experienced per-operative excessive blood loss, urinary bladder injury, post-operative stitch line infection, temporary neuropathy in lower limb, urinary tract infection, and difficulty in passing urine for few days.

In our study we advised conservative measure to those who refused surgery or were unfit for surgery at the time of diagnosis. Some of them returned for surgery after few days. Rest did not returned for follow up. Data is inadequate to study the result. Women who were treated with rubber ring pessary also did not return for follow up. However we got few cases of elderly women with offensive vaginal discharge, they were the cases of forgotten pessary. They were also treated conservatively with local dressing and antibiotics.

Conclusion: Genito-urinary prolapse cases are highly prevalent among the poor people and it is highly preventable by increasing awareness. Conservative management is a temporary measure. Surgery is the only remedy for symptomatic relief as well as for anatomical correction of defects.

Acknowledgement & declaration on conflict of interest:

Permission for publication of these data has been taken from hospital authority. There is no conflict of interest regarding this study

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