

## Vaginal hysterectomy for pelvic organ prolapse in Nepal

Sah DK<sup>1</sup>, Doshi NR<sup>2</sup>, Das CR<sup>3</sup>

<sup>1</sup>Lecturer, <sup>2</sup>Assistant Professor, <sup>3</sup>Professor, Department of Obstetrics and Gynaecology, Nepalgunj Medical College, Kohalpur, Nepal.

### Abstract

**Background:** UVP is a significant Public Health Problem in Nepal. This problem is mainly prevalent in rural areas where the women are socio – economically less privileged and cannot afford the costs of treatment.

**Objective:** An analysis of peri operative and post operative complications of vaginal hysterectomies for pelvic organ prolapse.

**Materials and methods:** A hospital based prospective study was carried out in the department of obstetrics and gynaecology, NGMC followed up from the time of operation to time of discharge.

**Results:** 632 cases underwent vaginal hysterectomy with financial support from UNFPA. There were no operative complications. The most common post operative complications as noted were retention of urine, pelvic infection & pelvic abscess. In two cases laparotomy was done for haemoperitoneum. Pelvic abscess was drained vaginally. Mortality was nil.

**Conclusion:** Proper screening before operation is the key to reduce operative as well as peri operative complications.

**Key words:** vaginal hysterectomy, pelvic organ prolapse, peri operative complications of vaginal hysterectomy

Vaginal hysterectomy was performed as early as 1813 as reported by Langenbach. In 1879 Halden reported a series of 52 cases with a mortality rate of 32 %. The mortality rate has since fallen to 5 – 6 % by 1890. In 1825 Langenbach made the first attempt to remove the uterus through the abdominal incision and Heaney first proposed the technique of vaginal hysterectomy. But it was viewed skeptically until in 1940 Te Linde an expert vaginal surgeon regenerated interest in vaginal surgery and in training gynaecologists. Among the many problems in women's health utero – vaginal prolapse (UVP) contributes to a major bulk of the reproductive health morbidity in Nepal. UVP is a significant Public Health Problem in Nepal. This problem is mainly prevalent in rural areas where the women are socio – economically less privileged and cannot afford the costs of treatment.

Surgical treatment of uterine prolapse was taken up with the financial support of UNFPA as part of Reproductive Health Programme. A study identified that 6,00,000 women have been affected by this problem, out of which 10,600 women need surgical treatment.

### Objectives

To help the women affected by UVP by giving surgical treatment. This will be an important objective to provide this treatment to socially under privileged and poorest women of the communities.

### Materials and methods

632 women, with the financial support of UNFPA, were given surgical treatment of genital prolapse at N.G.M.C. (Nepalgunj Medical College). Vaginal hysterectomies were performed during this period from October 31<sup>st</sup> to December 25<sup>th</sup> 2008 within this specified time. The duration included travel and a preparatory period of 64 days. Screening, consent and pre operative counselling were done prior to operation. Pre surgical screening was done in 937 women. Progress report (daily basis) was submitted to UNFPA both at central and district level.

### Results

1. Distribution of UVP – According to age - Fig. 1 shows maximum number of UVP cases belonging to the age group of 40 to 70 years. In Dadeldura maximum cases were among the age group of 30 to 60 years. Younger age group i.e. below 40 years belonged to Dadeldura in comparison to other districts.

### Correspondence

Dr. Dharendra K. Sah  
Lecturer, Department of Obst. & Gynaecology  
Nepalgunj Medical College, Kohalpur, Banke, Nepal  
E-mail: dhirendrksah@yahoo.com

Distribution of UVP - According to degree of prolapse who underwent surgery - Fig. 2 shows number of third degree UVP cases was maximum among those who

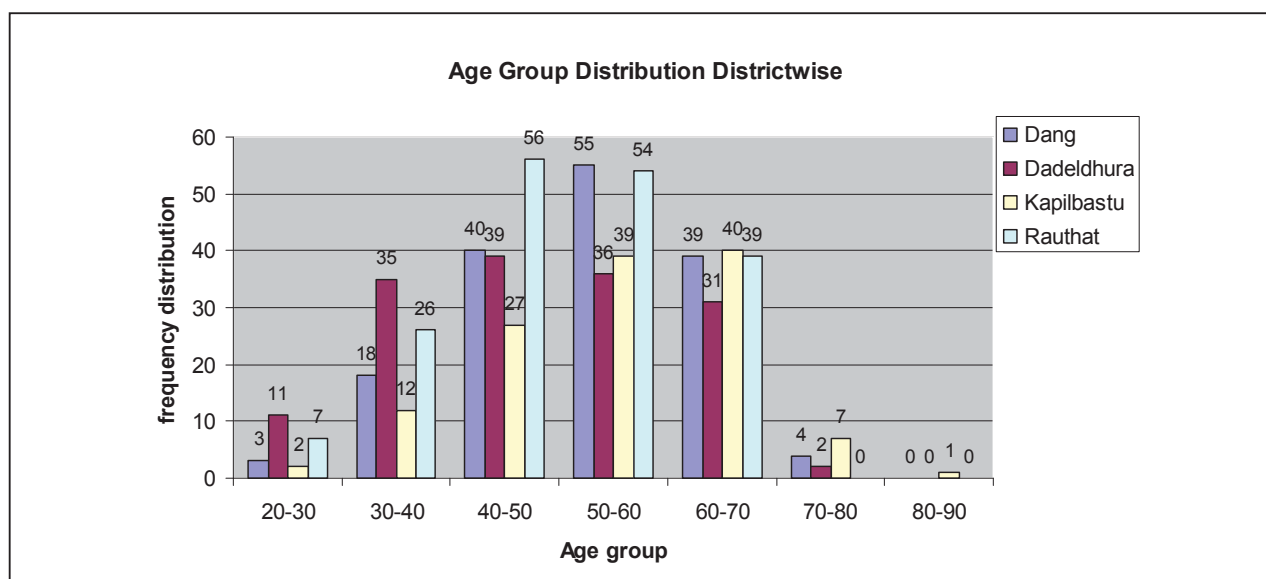
underwent surgery. Significant number of first degree uterine prolapse cases with cystocele underwent surgery in Dang and Dadeldhura.

**Table 1:** Post operative complications (n = 632)

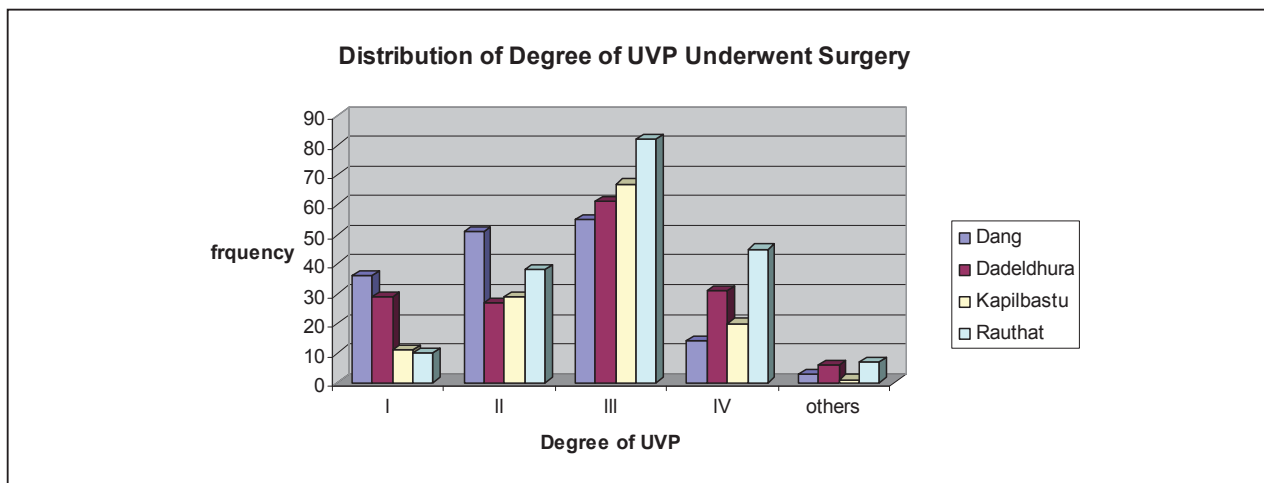
Complications	No. of cases	Percentage (%)
Retention of urine	11	1.74
Pelvic infection	10	1.58
Perineal infection	3	0.474
Pelvic abscess	3	0.474
Haemoperitoneum	2	0.316
Abdominal wound infection	1	0.158
U.T.I. / Fever	5	0.791
DEATHS	NIL	NIL
<b>Total Complications</b>	<b>35</b>	<b>5.5</b>

**Table 2:** Type of Surgical Management (for complications)

Operation	No. of cases	Percentage (%)
Laparotomy (for haemoperitoneum)	2	0.316
Vaginal drainage of pelvic abscess	5	0.791



**Fig 1:** District-wise age group



**Fig 2:** Distribution of degree of UVP who underwent surgery

### Discussion

632 cases of UVP underwent vaginal hysterectomy with financial support of UNFPA, under Nepalgunj Medical College, Kohalpur between October 31<sup>st</sup> to December 25<sup>th</sup> 2008.

305 cases were excluded from operation as they had the following problems – 99 cases suffering from anaemia (Hb % less than 9 gms/dl), 48 cases suffering from hypertension (BP >160/90 mm of Hg), 32 cases of COPD (chronic obstructive pulmonary disease), 14 cases family not completed, 7 cases > 80 years of age, 8 cases residing without family members, 74 cases disappeared or could not come due to “banda” or other unknown causes. Thus 305 cases of 937 cases were not operated.

In this series, the majority of women who underwent Vaginal Hysterectomy belonging to age group 30 to 50 years were common in Western Nepal<sup>6</sup>. In Egypt UVP occurs in the age group of 14 to 60 years age. In India (Tamil Nadu) age of onset of prolapse was 15 to 50 years. The incidence of UVP as quoted by others (like FHD, GTZ, UNFPA) is 25.1% in Nepal in the year 2000.

The incidence in other countries is – 17% in Australia & U.S., 8.5% in France and 27% in Istanbul (Turkey). Global prevalence is quoted as 2 – 20 % under the age of 25.

Marriage at a very young age and child birth is well co-related with pelvic organ prolapse. Most of the women have delivered at home unattended or attended by traditional birth attendants (*sudeni*). Only 7 – 9 % of women had their deliveries supervised by qualified personnel<sup>4</sup>.

More important reasons of increased intra abdominal pressure in post partum period are carrying heavy loads everyday on their backs or heads which would tighten the abdominal musculature thereby increasing pressure on the pelvic organs. Heavy sneezing during post partum period, pounding rice, climbing trees and lifting heavy weights during pregnancy and post partum periods also contributes to the problem<sup>1</sup>.

The recognition that neurological damage occurs during child birth is one of science’s significant contribution to the study of the pelvic floor. Even with post partum exercises or surgical repair a denervated muscle might not be expected to return to the same functional capacity as an innervated muscle. The damage to the nerves would be expected to be more when delivery is managed by an unskilled birth attendant (*sudeni*).

Ligaments must hold the unsupported pelvic organs. Congenital weakness of the supports or oestrogen deficiency (in peri menopausal age) - the consideration in both the situations is collagen. Malnutrition influences collagen formation and connective tissue strength.

In this study complications following vaginal hysterectomy for pelvic organ prolapse were 35 (i.e. 5.54%) whereas<sup>6</sup> found a complication rate of 8.6%. Shah CM<sup>2</sup> noted febrile complications in 31% and urinary tract infections in 18 % of cases. In contrast our study found febrile complications and urinary infections in 0.791 % of cases only. Saha R. et al<sup>3</sup> reported intra operative haemorrhage in 4 % of cases and secondary haemorrhage in 2 % of cases. In our study 2 cases (0.316 %) had post operative haemorrhage and required laparotomy.

## Conclusions

Pelvic organ prolapse is a significant public health problem in Nepal. Extensive information, prevention programmes and early management of genital prolapse should be the first step to reduce this reproductive morbidity.

Proper screening prior to operation greatly helps reduce post operative complications.

It is strongly suggested that remedial measures at governmental level and by non – governmental organisation is needed to give social support. The need is to improve living conditions, habitat and provide financial support for good nutrition and social and economic upliftment of the people at large.

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