

## Assessing Prevalence, Clinical Presentation, and Treatment of Gynecological Diseases in Older Women: Hospital-Based Study

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Conflict of interest: Nil

### Abstract:

**Aim:** The aim of the present study was to assess gynaecological disorders in geriatric women regarding their frequency, diagnosis and management.

**Methods:** It was a prospective observational study done over two years period . In our study there were 200 patients aged 60 years and above, amongst total admission of 2890 in the Gynaecology ward.

**Results:** 108 (54%) were in the age group of 60-65 years, 50 (25%) in the age group of 66-70 years, 30 (15%) in the age group of 71-75 years and 12 (6%) were more than 75 years. The most common presenting complaint was postmenopausal bleeding in 82 patients (41%), followed by pain and abdominal distention in 76 patients (38%). 64 patients (32%) complained of something coming out of introitus, 32 patients (16%) reported discharge per vaginam and 16 patients (8%) had urinary complaints. 86 females had single complaint while 112 patients had more than one complaint. Hypertension (72%) was the most common followed by chronic obstructive pulmonary disease (16%), hypothyroidism (14%), diabetes mellitus (12%), anemia (10%), coronary artery disease (8%) and other diseases like chronic kidney disease, deep vein thrombosis and liver disease which constituted 2% of the cases. Malignancy was the most frequent diagnosis with 110 (55%) patients having malignant disease followed by uterovaginal prolapse, ovarian cyst and urinary complaints. Of the total malignancies, ovarian cancer constituted 48% (n=96) followed by cervical cancer 32% (n=64) endometrial carcinoma 12% (n=24), vulval cancer 6% (n=12) and vaginal cancer 2% (n=4).

**Conclusion:** Post-menopausal bleeding is the commonest complaint. Ovarian and endometrial cancer is showing a rising trend in this age group. Though cervical cancer were the second most common malignancy in this group, most of these patients presented at advanced stage and hence were inoperable. Therefore, recommendations to discontinue screening in older age groups must be viewed with caution.

**Keywords:** Geriatric Women, Genital Malignancy, Gynecological Disorders, Ovarian And Endometrial Cancer.

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### Introduction

Geriatric gynaecology deals with gynaecological pathologies encountered in postmenopausal women aged 65 years and above. The Indian society which was pyramidal till 20th century is now on the verge of becoming a rectangular society- a society in which nearly all individual survive to advanced age and then succumb rather abruptly over a narrow age range centering around the age of 85. [1] Older women often question the need for periodic gynecologic examinations after menopause. The answer of course is that they should continue to protect their health. [2] Age does not prevent the development of cancer of the genitalia or breast. Although, the incidence of several genital malignancies decreases after menopause. That of some other cancers-notably of the endometrium,

vagina, and vulva-actually increases. Some older women with atrophic vaginal and vulvar tissue resulting from hypoestrogenism hesitate to come for examination because of the pain produced by digital vagino-abdominal palpation or by insertion of a Graves or Pederson vaginal speculum. [3]

The word Geriatrics was coined by Dr. Ignatz Natcher an Austrian physician in 1909. However, it was in 1935 that a British doctor Marjory Warren, working in USA first developed the practical concept of geriatric rehabilitation. With her initiation the elderly patients were gradually taken over by teaching hospitals. [4] Many studies from developed countries defined older persons as those aged more than 65 years, whereas some use the cut off of 60 yrs. Life expectancy of India is 61 years

as compared to 72 to 82 years in the developed countries. Thus, the cutoff of 65 years may not be appropriate in Indian context and therefore a lower cut off of greater than and equal to 60 years is used. [5]

The various gynaecological disorders peculiar to ageing are pelvic organ prolapse, postmenopausal bleeding, gynaecological malignancies, urinary incontinence, genital tract infections, vulvovaginal disorders. The spectrum of gynecological disorders in India differ from those in developed world as there are no screening programmes for early detection and hardly any dedicated geriatric units. [6] Ageing is a natural process and should be regarded as a normal, inevitable biological phenomenon. [7] The word Geriatrics was coined by Dr. Ignatz Natcher an Austrian physician in 1909. However, it was in 1935 that a British doctor Marjory Warren, working in USA first developed the practical concept of geriatric rehabilitation. [4] Many studies from developed countries defined older persons as those aged more than 65 years, whereas some use the cut off of 60 yrs. Life expectancy of India is 61 years as compared to 72 to 82 years in the developed countries. Thus, the cutoff of 65 years may not be appropriate in Indian context and therefore a lower cut off of greater than and equal to 60 years is used. [8]

The aim of the present study was to assess gynaecological disorders in geriatric women regarding their frequency, diagnosis and management.

## Materials and Methods

It was a prospective observational study done over two years period at Patna Medical College and Hospital, Patna, Bihar, India. In our study there were 200 patients aged 60 years and above, amongst total admission of 2890 in the Gynaecology ward.

Detailed history, including history related to menopause, personal history and medical history was recorded. Gynecological examination was done including Papanicolaou smear (Pap smear). Routine investigations included a complete haemogram, blood biochemistry, urine examination and pelvic ultrasonography. Probable diagnosis of gynecological disorders was made and if any special investigations were required, they were done accordingly. Fractional curettage and cervical biopsy if indicated was taken and tissue sent for histopathological examination (HPE) in the Pathology Department of Pmch . Cancers markers if required were also advised. Any other special investigations like Computed tomography scan and Magnetic resonance imaging if required were advised.

After definitive diagnosis of gynecological disorders, the treatment was started accordingly. All data collected was recorded and analyzed statistically.

## Results

**Table 1: Age distribution of elderly women and incidence of gynecological symptoms**

Age (in years)	Number	Incidence %
60-65	108	54
65-70	50	25
70-75	30	15
>75	12	6
<b>Gynecological symptoms</b>		
Post-menopausal bleeding	82	41
Pain abdomen and distension	76	38
Something coming out of introitus	64	32
Discharge per vaginum	32	16
Urinary symptoms	16	8
Women with single symptom	86	43
Women with multiple symptoms	112	56

108 (54%) were in the age group of 60-65 years, 50 (25%) in the age group of 66-70 years, 30 (15%) in the age group of 71-75 years and 12 (6%) were more than 75 years. The most common presenting complaint was postmenopausal bleeding in 82 patients (41%), followed by pain and abdominal

distention in 76 patients (38%). 64 patients (32%) complained of something coming out of introitus, 32 patients (16%) reported discharge per vaginum and 16 patients (8%) had urinary complaints. 86 females had single complaint while 112 patients had more than one complaint.

**Table 2: Associated co morbidities in geriatric women**

Disease	Number	Incidence%
Hypertension	144	72
COPD	32	16
Hypothyroidism	28	14
Diabetes Mellitus	24	12
Anemia	20	10
Coronary Artery Disease	16	8
Others (DVT, CKD, Liverdisease)	4	2

Hypertension (72%) was the most common followed by chronic obstructive pulmonary disease (16%), hypothyroidism (14%), diabetes mellitus (12%), anemia (10%), coronary artery disease (8%) and other diseases like chronic kidney disease, deep vein thrombosis and liver disease which constituted 2% of the cases.

**Table 3: Spectrum of gynaecological disorders in elderly women and Gynaecological cancers in geriatric women**

Disease	No.	Overall Incidence %
Malignancies	110	55
Uterovaginal prolapse	60	30
Benign Ovarian lesion	15	7.5
Urinary incontinence	15	7.5
<b>Type of cancer</b>		
Ovarian CA	96	48
Cervical CA	64	32
Endometrial CA	24	12
Vulval CA	12	6
Vaginal CA	4	2

Malignancy was the most frequent diagnosis with 110 (55%) patients having malignant disease followed by uterovaginal prolapse, ovarian cyst and urinary complaints. Of the total malignancies, ovarian cancer constituted 48% (n=96) followed by cervical cancer 32% (n=64) endometrial carcinoma 12% (n=24), vulval cancer 6% (n=12) and vaginal cancer 2% (n=4).

**Table 4: Types of surgeries performed in gynecological disorders**

Type of surgery	Number	Incidence (%)
VH with PFR	50	25
TAH with BSO	48	24
Extra fascial hysterectomy	16	8
B/L Salpingo ooprectomy	4	2
Wertheim's hysterectomy	6	3
Sacrospinous colpopexywith cystocele repair	6	3
Pyometra	20	10
Fractional curettage	32	16
Cervical Bx	10	5
Hysteroscopic Bx	2	1
Vulvectomy with inguinallymphadenectomy	2	1
Pessary	2	1
Burch colposuspension	2	1

**Table 5: Treatment modalities in different type of malignancies**

Type of malignancy	Treatment given	No. of patients
Ovarian cancer, n-48	TAH with BSO with Infracolic omentectomy	44
	Neo adjuvant chemotherapy	4
	Wertheim's hysterectomy	6
Cervical cancer, n-32	Extra fascial hysterectomy	2
	Radiation	24
Endometrialcancer, n-12	Extra fascial hysterectomy with pelvic lymphadenectomy	12
Vulval cancer, n-6	Vulvectomy with inguinal lymphadenectomy	8

Table 5 showed that in 44 patients of ovarian cancer, exploratory laparotomy proceed total

abdominal hysterectomy with bilateral salpingo oophorectomy with infracolic omentectomy with

surgical staging of tumour was done. Five patients were sent for neoadjuvant chemotherapy and one patient with Krukenberg tumor with cancer breast was referred to department of surgery for further management. Six out of 32 patients diagnosed with cervical cancer underwent Wertheim's hysterectomy while two had extra fascial hysterectomy and rest reported with advanced stage disease and were referred for radiation therapy. Extra fascial hysterectomy with pelvic lymphadectomy was done in all 12 patients of endometrial carcinoma.

### Discussion

A major challenge for the world in the 21st century is the ageing of its population. [9] The world's elderly population is growing at a rate of 2.4% per year. The age shift is the result of reduced birth rates, improvement in health and nutrition and increased longevity. The aging population has a direct effect on health-care delivery because it is associated with a new disease pattern as well as transitions in economic, social and even ethical issues. [10] The Indian society which was pyramidal till 20th century, has become rectangular today and morbidity related to geriatric gynaecological problems is on the rise. [11] In India the number of people aged more than 60 years has grown from 5.4% in 1951 to 8.4% in 2011 and is projected to become 12.5% by 2025. As per the census of 2011, whereas for total Indian population, sex ratio is in favor of male population in ratio 940:1000, however for elderlies at sixty years and above population it is in favour of elderly women by 1022:1000. There are 50.33 million elderly women in India as per 2011 census. [12]

108 (54%) were in the age group of 60-65 years, 50 (25%) in the age group of 66-70 years, 30 (15%) in the age group of 71-75 years and 12 (6%) were more than 75 years. This is consistent with the study done by Dey et al in which 45.56% of the patients admitted in ward above 60 years were in the age group of 60-65 years. [11] The most common presenting complaint was postmenopausal bleeding in 82 patients (41%), followed by pain and abdominal distention in 76 patients (38%). 64 patients (32%) complained of something coming out of introitus, 32 patients (16%) reported discharge per vaginum and 16 patients (8%) had urinary complaints. 86 females had single complaint while 112 patients had more than one complaint. The risk of developing a gynecological cancer is highest in elderly women. [13] Hypertension (72%) was the most common followed by chronic obstructive pulmonary disease (16%), hypothyroidism (14%), diabetes mellitus (12%), anemia (10%), coronary artery disease (8%) and other diseases like chronic kidney disease, deep vein thrombosis and liver disease which constituted 2% of the cases. Malignancy was the most frequent

diagnosis with 110 (55%) patients having malignant disease followed by uterovaginal prolapse, ovarian cyst and urinary complaints. Of the total malignancies, ovarian cancer constituted 48% (n=96) followed by cervical cancer 32% (n=64) endometrial carcinoma 12% (n=24), vulval cancer 6% (n=12) and vaginal cancer 2% (n=4). This is consistent with the trend increasingly reported from India in which ovarian and corpus uteri malignancies are on the rise in the past two decades. [14] Cancer cervix is the second commonest malignancy seen in females after cancer Breast in India. [15,16]

The result showed that in 44 patients of ovarian cancer, exploratory laparotomy proceed total abdominal hysterectomy with bilateral salpingo oophorectomy with infracolic omentectomy with surgical staging of tumour was done. Five patients were sent for neoadjuvant chemotherapy and one patient with Krukenberg tumor with cancer breast was referred to department of surgery for further management. Six out of 32 patients diagnosed with cervical cancer underwent Wertheim's hysterectomy while two had extra fascial hysterectomy and rest reported with advanced stage disease and were referred for radiation therapy. [17] Extra fascial hysterectomy with pelvic lymphadectomy was done in all 12 patients of endometrial carcinoma. A review of cancer deaths in women in Australia aged 50 and above found that 70% could have been avoided by appropriate screening. In the women aged 50 to 74, 67% had never been screened, and none of those aged 75 and over had had a Papsmear. [18] This has been corroborated by studies in United States that because of decreased medical office visits there is late stage diagnosis of cancer cervix in the elderly. [19] This was consistent with the study done by Ying Gao et al where radiotherapy was the most frequent treatment given to geriatric patients in cancer cervix. [20]

### Conclusion

Post-menopausal bleeding is the commonest complaint. Ovarian and endometrial cancer is showing a rising trend in this age group. Though cervical cancer were the second most common malignancy in this group, most of these patients presented at advanced stage and hence were inoperable. Therefore, recommendations to discontinue screening in older age groups must be viewed with caution. Reluctance to undergo pelvic examination in this group must be sensitively addressed so that increased morbidity due to delay in diagnosis is avoided. Therefore, there should be separate operation theater units to handle this fragile subset of population.

**References**

1. Baden WF, Walked TA. Genesis of the vaginal profile: a correlated classification of vaginal relaxation. *Clinical obstetrics and gynecology*. 1972 Dec 1;15(4):1048-54.
2. Kriplani A, Banerjee K. An overview of age of onset of menopause in northern India. *Maturitas*. 2005 Nov 1;52(3-4):199-204.
3. Jamal A, Siegel R, Ward E, Murray T, Xu J, Smigal C et al. Cancer statistics, CA Cancer J Clin 2006;56:106-30.
4. Barton A, Mulley G. History of the development of geriatric medicine in the UK. *Post-graduate medical journal*. 2003 Apr;79 (930): 229-34.
5. Takkar N, Goel P, Dua D, Mohan H, Huria A, Sehgal A. Spectrum of gynaecological disorders in older Indian women: a hospital-based study. *Asian J Gerontol Geriatr*. 2010 Dec; 5:69-73.
6. Beck RP. Pelvic relaxational prolapse. In: Kase NG, Weingold AB, editors. *Principles and practice of clinical gynaecology*. New York: Wiley & sons 1983, 677-85.
7. Park K. Park's textbook of preventive and social medicine. *Preventive Medicine in Obstet, Paediatrics and Geriatrics*. 2005.
8. Sood N, Chandra P, Dhiman B. Gynecological disorders in geriatric women regarding their frequency, diagnosis and management in the state of Himachal Pradesh, India. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*. 2018 Jan 1;7(1):297-303.
9. Takkar N, Goel P, Dua D, Mohan H, Huria A, Sehgal A. Spectrum of gynaecological disorders in older Indian women: a hospital based study. *Asian J Gerontol Geriatr*. 2010 Dec; 5: 69-73.
10. Ramin M, Wilberto N, Hervy AE. Gynaecological malignancy in older women. *Oncology*. 2001;5.
11. Dey R, Saha MM, Rakshit A, Biswas SC, Mukhopadhyay A. The epidemiology of gynaecological disorders in geriatric population: a hospital based study. *Journal of Evolution of Medical and Dental Sciences*. 2013 Apr 8;2 (14):2329-34.
12. Census of India 2011.
13. US National Institutes of Health. *Cancer of the cervix uteri*. 2005.
14. Yeole BB. Trends in cancer incidence in esophagus, stomach, colon, rectum and liver in males in India. *Asian Pac J Cancer Prev*. 2008 Mar;9(1):97-100.
15. Ferlay J, Soerjomataram I, Ervik M. GLOBOCAN 2012 v1.0, Cancer Incidence and Mortality Worldwide: IARC Cancer Base No. 11 [Internet]. Lyon, France: International Agency for Research on Cancer; 2013.
16. Bray F, Ren JS, Masuyer E, Ferlay J. Estimates of global cancer prevalence for 27 sites in the adult population in 2008. *Int J Cancer*. 2013;132(5):1133- 45.
17. Guidelines for Cervical Cancer Screening Programme.
18. Mitchell H, Medley G, Higgins V. An audit of the women who died during 1994 from cancer of the cervix in Victoria, Australia. *Australian and New Zealand journal of obstetrics and gynaecology*. 1996 Feb;36(1):73-6.
19. Ferrante JM, Gonzalez EC, Roetzheim RG, Pal N, Woodard L. Clinical and demographic predictors of late-stage cervical cancer. *Archives of family medicine*. 2000 May 1;9(5):439.
20. Gao Y, Ma JL, Gao F, Song LP. The evaluation of older patients with cervical cancer. *Clinical interventions in aging*. 2013 Jun 25: 783-8.