

Prospective Research Evaluating Gynecological Diseases among Elderly Women Conducted in a Hospital Setting

Tanu Sharma¹, Abhishek Ranjan², Minu Sharan³

¹Senior Resident, Department of Obstetrics and Gynaecology, Patna Medical College and Hospital, Patna, Bihar, India

²Assistant Professor, Department of General Surgeon, Katihar medical college and Hospital, Katihar, Bihar, India

³Professor, Department of Obstetrics and Gynaecology, Patna Medical College and Hospital, Patna, Bihar, India

Received: 18-02-2024 / Revised: 11-03-2024 / Accepted: 26-04-2024

Corresponding Author: Dr. Abhishek Ranjan

Conflict of interest: Nil

Abstract

Aim: The present study was conducted to assess gynecological disorders among geriatric women

Material & Methods: The present prospective, observational, cross-sectional study was conducted in the Department Of Obstetrics And Gynaecology, Patna Medical College and Hospital, Patna, Bihar, India over a period of one year which comprised of 200 women aged >65 years old. All subjects were enrolled after they agreed to participate in the study after signing written informed consent.

Results: Out of 100 patients, 86% belonged to age group 65-74 years. The study population was 70% from rural and 30% urban areas. Only 15% of the patients were literate. Geriatric women had higher number of pregnancies. Their mean age at menopause was 50.15±5.35 years and mean duration of menopause was 20.11±4.64 years. Something coming out of vagina (SCOV, 24%) and Postmenopausal bleeding (PMB, 31%) were the two major presenting complaints. Amongst the co-morbidities, Hypertension was the single most common followed by Anaemia, Diabetes mellitus, Thyroid disorders, Heart diseases. Presence of multiple co-morbidities complicates the diagnosis, treatment and natural course of individual gynaecological health problems in older women. The most common gynaecological disorder was genital tract malignancies (34%), followed by POP (24%) and urogenital infections (17%). Of those with genital malignancies, 32 had carcinoma cervix, 7 had carcinoma ovary, 7 had carcinoma endometrium, and 2 had carcinoma vulva.

Conclusion: Pelvic organ prolapse and genital malignancy are the major gynaecological causes of hospital admissions in the patients above 60 years. Postmenopausal period is an important part of a woman's life. The geriatric phase is even more important as ageing also becomes a factor.

Keywords: Geriatric Gynaecology, Gynaecological Pathologies, Postmenopausal Women.

This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

Introduction

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. [1] 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. [2]

A major challenge for the world in the 21st century is the ageing of its population. [2] 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 patterns as well as transitions in economic, social and even ethical issues. [3] The Indian society which was pyramidal till 20th century, has become rectangular today and morbidity related to geriatric gynaecological problems is on the rise. [4] 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 elderly 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. [5] Gynaecological disorders in older women differ from those who are younger. Elderly women experience vasomotor, urogenital, psychosomatic, psychological symptoms and sexual dysfunction. These urogenital changes make women vulnerable to gynaecological morbidities. Common gynaecological problems encountered in elderly women are vulvovaginal inflammation, genital prolapse, postmenopausal bleeding, malignancy and alteration in bladder function. [6]

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 cantering around the age of 85. [7] 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. [8] 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-actuality 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. [9] 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. [10]

The purpose of the present study is to assess the various types of gynecological problems faced by older women in India and to emphasize the need of promoting screening programmes for early detection

and treatment of cancers and establishment of geriatric units to meet the special need of this subset of population

Materials & Methods

The present prospective, observational, cross-sectional study was conducted in the Department Of Obstetrics And Gynaecology, Patna Medical College and Hospital, Patna, Bihar, India over a period of one year which comprised of 100 women aged >65 years old. All subjects were enrolled after they agreed to participate in the study after signing written informed consent.

Patient demographics such as age, education, marital status, parameters such as parity, age at menopause, type of menopause, years since menopause, medical history and details of all gynecological problems were recorded. Health related quality of life was assessed by using Menopause Rating Scale (MRS). A thorough clinical and gynecological examination was done. Routine investigations such as complete haemogram, blood biochemistry, urine examination, pelvic sonography and pap smear were done.

Pelvic organ prolapsed (POP) was graded as per the Baden-Walker system on a scale of 0 to 4; grade 0 was defined as no prolapse, grade 1 as prolapse halfway to hymen, grade 2 as prolapse upto hymen, grade 3 as prolapse halfway beyond the hymen, and grade 4 complete prolapse. 4 The degree of cystocele, urethrocele, rectocele, and enterocele was also assessed. Postmenopausal bleeding (PMB) was defined as vaginal bleeding 12 months after spontaneous cessation of menstruation. Urinary incontinence was defined as involuntary leakage of urine. Urinary tract infection (UTI) was the presence of viable

Statistical Analysis

Results thus obtained were subjected to statistical analysis P value less than 0.05 was considered significant. The data was analysed by computer software IBM Statistical Package for Social Sciences (SPSS) version 20.0. The qualitative variables were assessed as mean±standard deviation. The quantitative variables were expressed as frequencies and percentages.

Results

Table 1: Patient demographics and Distribution of patients according to mean age, mean age at menopause, mean duration of menopause

	Number (n)	%
Age (Years)		
65-74	86	86
75-84	11	11
≥85	3	3
Parity		
P 0	3	3
P 1-3	19	19
P 4-6	48	48
P 7-14	30	30
Educational status		
Illiterate	85	85
Literate	15	15
Background		
Rural	70	70
Urban	30	30
Mean±standard deviation		
Age (years)	65.45±4.76	
Age at menopause	50.15±5.35	
Years since menopause	20.11±4.64	

Out of 100 patients, 86% belonged to age group 65-74 years. The study population was 70% from rural and 30% urban areas. Only 15% of the patients were literate. Geriatric women had higher number of pregnancies. Their mean age at menopause was 50.15±5.35 years and mean duration of menopause was 20.11±4.64 years.

Table 2: Chief presenting complaint

Chief Complaint	Number (n)
SCOV	24
PMB	31
Abdominal distension	8
Pain lower abdomen	10
Discharge per vaginum	8
Dysuria	6
Backache/joint pains	9
Vulval itching	3
Vulval growth	1
Total	100

Something coming out of vagina (SCOV, 24%) and Postmenopausal bleeding (PMB, 31%) were the two major presenting complaints.

Table 3: Associated co-morbidities

Comorbidity	Number (n)
Hypertension	34
Anaemia	14
Diabetes mellitus	10
Thyroid disorders	8
Heart disease	5
COPD	4
Asthma	2
Others	5

Amongst the co-morbidities, Hypertension was the single most common followed by Anaemia, Diabetes mellitus, Thyroid disorders, Heart diseases. Presence of multiple co-morbidities complicates the diagnosis, treatment and natural course of individual gynaecological health problems in older women.

Table 4: Gynecological disorders

	Number (n)	%
Pelvic organ prolapse (POP)	24	24
Genital malignancies	32	32
-Carcinoma cervix	16	16
-Carcinoma endometrium	7	7
-Carcinoma ovary	7	7
-Carcinoma vulva	2	2
Benign adnexal masses	6	6
Urogenital infections	17	17
Urinary incontinence	3	3
Endometrial hyperplasia	5	5
Proliferative endometrium	1	1
Atrophic endometrium	1	1
Endometrial polyp	2	2
Cervical polyp	1	1
Vulval papilloma	1	1
Osteoporosis	6	6
Pseudomyxoma peritonei	1	1

The most common gynaecological disorder was genital tract malignancies (34%), followed by POP (24%) and urogenital infections (17%). Of those with genital malignancies, 32 had carcinoma cervix, 7 had carcinoma ovary, 7 had carcinoma endometrium, and 2 had carcinoma vulva.

Discussion

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 cantering around the age of 85. [11] Our success in postponing death has increased the upper segment of demographic contour. The average life expectancy in India is 68 years. The rate of increase in number of postmenopausal women is substantially faster in developing than developed world. The number of women aged 60 years has grown from 5.4% in 1951 to 7.8% in 2001. [12]

Out of 100 patients, 86% belonged to age group 65-74 years. Only 15% of the patients were literate. Geriatric women had higher number of pregnancies. Their mean age at menopause was 50.15±5.35 years and mean duration of menopause was 20.11±4.64 years which were comparable to that for north Indian women. [8] The study population was 70% from rural and 30% urban areas. Only 15% of the patients were literate. Geriatric women had higher number of pregnancies. Something coming out of vagina (SCOV, 24%) and Postmenopausal bleeding (PMB, 31%) were the two major presenting complaints.

PMB in older women should be considered a sign of underlying genital cancer and warrants thorough evaluation. The unique features of geriatric illnesses are chronicity and heterogeneity, greater severity and slow or sometimes no recovery. There is an obvious need of screening programme for early detection of gynecological malignancy to provide better geriatric services, but a paucity of data regarding gynaecological morbidity in geriatric women hampers proper planning. Gynaecological disorders in older women differ from those who are younger. [13] Elderly women experience vasomotor, urogenital, psychosomatic, psychological symptoms and sexual dysfunction. [14] Studies have shown that there is a significant increase in the incidence of cancer after 65 years of age. In western world, endometrial cancer was commonest genital malignancy, followed by ovarian malignancy. [9] This was in contrast to our population, where carcinoma cervix was most common followed by ovarian and endometrium, in that order. Detection of carcinoma cervix at advanced stages was due to lack of screening programmes.

Amongst the co-morbidities, Hypertension was the single most common followed by Anaemia, Diabetes mellitus, Thyroid disorders, Heart diseases. Presence of multiple co-morbidities complicates the diagnosis, treatment and natural course of individual gynaecological health problems in older women. The most common gynaecological disorder was genital tract malignancies (34%), followed by POP (24%) and urogenital infections (17%). Of those with genital malignancies, 32 had carcinoma cervix, 7 had carcinoma ovary, 7 had carcinoma

endometrium, and 2 had carcinoma vulva. Sood et al [15] assessed gynaecological disorders in geriatric women regarding their frequency, diagnosis and management. 224 patients aged 60 years and above were admitted over a period of one year. The commonest presenting complaint was postmenopausal bleeding in 41.07% of patients. 80.80% patients had one or more comorbid conditions. Malignancy was the most frequent diagnosis 54% followed by uterovaginal prolapse in 30.35%. Olsen AL et al, showed in their study that the age-specific incidence of genital prolapse increased with advancing age and most patients were older, postmenopausal, parous, and overweight. [16] This was similarly found in our study. Estrogen receptors are widely present in the tissues that form the pelvic floor. Rizk et al. argued that postmenopausal estrogen deficiency has adverse effects on biologic ageing and pelvic floor support mechanism. [17]

Conclusion

Pelvic organ prolapse and genital malignancy are the major gynaecological causes of hospital admissions in the patients above 60 years. Postmenopausal period is an important part of a woman's life. The geriatric phase is even more important as ageing also becomes a factor. The changes in tissue milieu due to ageing cause difficulties in the application of treatment procedures posing an additional obstacle. Thus, caring for these women in their reproductive years as well as in later life should be an aim for all gynaecologists. The high incidence of carcinoma cervix in our set up emphasizes the urgent need for screening programmes for postmenopausal women.

References

1. Barton A, Mulley G. History of the development of geriatric medicine in the UK. *Postgraduate medical journal*. 2003 Apr;79 (93 0):229-34.
2. Takkar N, Goel P, Dua D, Mohan H, Huria A, Sehgal A. Spectrum of gynaecological disorders in older Indian women: a hospitalbased study. *Asian J Gerontol Geriatr*. 2010 Dec;5:69-73.
3. Ramin M, Wilberto N, Hervy AE. Gynaecological malignancy in older women. *Oncology*. 2001;5.
4. 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.
5. Census of India 2011.
6. Scott RB. Common problems in geriatric gynecology. *The American Journal of Nursing*. 1958 Sep 1:1275-7.
7. 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.
8. Kriplani A, Banerjee K. An overview of age of onset of menopause in northern India. *Maturitas*. 2005 Nov 1;52(3-4):199-204.
9. Jamal A, Siegel R, Ward E, Murray T, Xu J, Smigal C et al. Cancer statistics, *CA Cancer J Clin* 2006;56:106-30.
10. Beck RP. Pelvic relaxational prolapse. In: Kase NG, Weingold AB, editors. *Principles and practice of clinical gynaecology*. New York: Wiley & sons 1983, 677-85.
11. Fritz MA, Speroff L. Menopause and the Perimenopausal Transition. In: *Clinical Gynaecologic Endocrinology and Infertility*. 8th ed. Philadelphia, PA: Wolters Kluwer (India) Pvt Ltd, New Delhi.
12. New Delhi: Census of India.
13. Magon N, Kalra B, Malik S, Chauhan M. Stress urinary incontinence: what, when, why, and then what? *J Midlife Health* 2011;2(2):57-64.
14. Kohli HS, Bhaskaran MC, Muthukumar T, Thennarasu K, Sud K, Jha V, Gupta KL, Sakhuja V. Treatment-related acute renal failure in the elderly: a hospital-based prospective study. *Nephrology dialysis transplantation*. 2000 Feb 1;15(2):212-7.
15. 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):29 7-303.
16. Olsen AL, Smith VJ, Bergstrom JO, Colling JC, Clark AL. Epidemiology of surgically managed pelvic organ prolapse and urinary incontinence. *Obstetrics & Gynecology*. 1997 Apr 1;89(4):501-6.
17. Rizk DE, Fahim MA. Ageing of the female pelvic floor: towards treatment a la carte of the "geripause". *International Urogynecology Journal*. 2008 Apr;19:455-8.