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Original Research

A prospective study on female geriatric population attending gynae and surgery OPD at our tertiary care centre, incidence of various diseases and their follow up for 6 months along with management

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Abstract
Introduction- Women have unique health concerns and are affected by number of health issues as compared to men of same age. Geriatric gynaecological problems have not received adequate attention in India. The present study was conducted at a tertiary care centre to assess the incidence of various diseases and their follow up for 6 months along with medical and surgical management among female geriatric patients visiting OPD of gynaecology and surgery department.
Material and methods- The present prospective study was conducted at department of gynaecology of a tertiary care centre during the study period of one year (2023-24) among 450 elderly women with age above 60 years. Complete demographic and medical history was taken and results were obtained with the help of SPSS version 25.0.
Results- Maximum patients were in the age group of 60-65 years (55.5%) and least were in the age group of greater than 75 years (11.1%). The predominant presenting complaint was postmenopausal bleeding in 44.4%, succeeded by pain and abdominal distention in 41.1%. The most common gynaecological disorders found in patients were Pelvic organ prolapsed 112 (24.8%) and genital malignancies 135 (30%). Most common type of surgery performed among gynaecological disorder patients were VH with PFR 108 (24%), TAH with BSO99 (22%), Pyometra drainage 45 (10%), Fractional curettage 91 (20.3%) and Cervical biopsy 22 (4.8%).The surgical disorders diagnosed in patients were benign breast mass 13 (2.8%), Ductal papilloma7 (1.5%), Carcinoma of breast45 (10%), Stress incontinence 15 (3.3%), Urge incontinence 12 (2.6%), Post operative fistula10 (2.2%), Urethral strictures3 (0.6%) and Intestinal problems 11 (2.4%). Type of surgery performed in surgical disorders were Lumpectomy 12 (2.6%), Partial mastectomy 8 (1.7%), Segmental mastectomy 20 (4.4%), Mastectomy with reconstruction 25 (5.5%), Uterine drainage 40 (8.8%), Intestinal resection with primary anastomosis6 (1.3%) and Laparoscopy 5 (1.1%). 338 (75.1%) got completely recovered and no chance of reappearance of symptoms was found.
Conclusion- Hospitalizations in those over 60 are mostly due to genital cancer, pelvic organ prolapsed and urinary problems. Postmenopause is a crucial time for women. Aging makes the geriatric phase more important. Aging affects tissue milieu, making therapy difficult. Thus, all gynecologists should treat women throughout their reproductive lives. Cervical cancer is common in our area, making postmenopausal screening programs essential.
Keywords- ageing, cancer, disorder, geriatric, gynaecology, management, postmenopausal, women

INTRODUCTION

The term Geriatrics was introduced by Dr. Ignatz Natcher, an Austrian physician, in 1909. In 1935, British physician Marjory Warren, practicing in the USA, first formulated the practical notion of geriatric rehabilitation. Following her commencement, the elderly patients were progressively assumed by teaching hospitals. [1] Numerous research from developed nations categorize older individuals as those beyond 65 years of age, while others employ a threshold of 60 years. The life expectancy in India is 61 years, whereas it ranges from 72 to 82 years in

wealthy countries. Consequently, the threshold of 65 years may be unsuitable in the Indian setting; so, a revised cutoff of 60 years or older is employed. [2]

Women experience distinct health challenges that are either more common in females than in males or conditions that, while prevalent in both genders, necessitate alternative treatment strategies for women; this underscores the importance of women's health. Women's health spans various areas, including menstrual and reproductive system diseases, infertility, pregnancy, and menopause. In underdeveloped nations such as India, significant emphasis is placed on maternal health, a component of women's health, rather than on comprehensive women's health or reproductive health specifically non-pregnant ladies.[3]

Gynaecological diseases in older women differ from those in younger people. Elderly women encounter vasomotor, urogenital, psychosomatic, psychological problems, and sexual dysfunction. These urogenital alterations render women susceptible to gynecological morbidities. Prevalent gynecological issues faced by aged women include vulvovaginal irritation, genital prolapse, postmenopausal hemorrhage, malignancy, and changes in bladder function.[4]

The aging population is becoming a prominent global phenomenon. Among the elderly, women warrant particular consideration as they typically outlast males in the majority of civilizations. Nonetheless, postmenopausal and geriatric gynecological issues have not been sufficiently addressed in India. A screening program for the early detection of gynecological malignancies is clearly necessary to enhance geriatric services; however, a lack of data concerning gynaecological morbidity in elderly women impedes effective planning.[5]

Hence the present study was conducted at a tertiary care centre to assess the incidence of various diseases and their follow up for 6 months along with medical and surgical management among female geriatric patients vising OPD of gynaecology and surgery department.

MATERIAL AND METHODS

The present prospective study was conducted at department of gynaecology of a tertiary care centre during the study period of one year (2023-24). Ethical clearance was taken from institutional ethics committee of the allied institute before commencement of study. Patients were asked to sign an informed consent form after explaining them the complete procedure of study.

Through consecutive sampling a total of 450 women were selected for the study on the basis of inclusion and exclusion criteria. All elderly women with age above 60 years who agreed to participate were included in the study. Women who refused to participate were excluded from the study.

A comprehensive history, encompassing menopause-related history, personal history, and medical history, was documented. A gynaecological examination was conducted, including a Papanicolaou smear (Pap smear). Standard investigations encompassed a comprehensive haemogram, blood biochemistry analysis, urinalysis, and pelvic ultrasound.

A probable diagnosis of gynaecological diseases was established, and any necessary special examinations were conducted appropriately. Fractional curettage and cervical biopsy, if warranted, were performed, and the tissue was dispatched for histopathological examination (HPE) to the Pathology Department. Cancer indicators, if necessary, were also recommended. Additional specialised tests, such as computed tomography scans and magnetic resonance imaging, were recommended if necessary. Following the conclusive identification of gynaecological problems, treatment commenced appropriately.

The results collected were analysed statistically, with a P value of less than 0.05 deemed significant. The data was processed using IBM Statistical Package for Social Sciences (SPSS) version 25.0 software. The qualitative factors were evaluated as mean ± standard deviation.

The quantitative variables were represented as frequencies and percentages.

RESULTS

Maximum patients were in the age group of 60-65 years (55.5%) and least were in the age group of greater than 75 years (11.1%) as shown in table 1.

Table 1 Distribution of patients according to age

Age group	N (%)
60-65	250 (55.5)
65-70	95 (21.1)
71-75	55 (12.2)
>75	50 (11.1)

The predominant presenting complaint was postmenopausal bleeding in 44.2%, succeeded by pain and abdominal distention in 41.1%. 33.3% reported the sensation of something emerging from the introitus, 20% indicated vaginal discharge, 8.8 % patients experienced urinary problems14.4 % had heaviness in breast and 2.4% had intestinal problems as shown in table 2.

Table: 2 Incidence of symptoms in patients

Symptoms	N (%)
Postmenopausal haemorrhage	199 (44.2)
Pain and abdominal distension	185 (41.1)
Something emerging from introitus	150 (33.3)
Vaginal discharge	90 (20)
Urinary problems	40 (8.8)
Heaviness in breast	65 (14.4)
Intestinal problems	11 (2.4)

The gynaecological disorders found in patients were Pelvic organ prolapsed 112(24.8%), genital malignancies 135 (30%), Benign adnexal masses47 (10.4%), Endometrial hyperplasia 15 (3.3%), Proliferative endometrium 10 (2.2%), Atrophic endometrium 9 (2%), Endometrial polyp 8 (1.7%), Cervical polyp 8 (1.7%), Vulval papilloma 7(1.5%), Osteoporosis 7 (1.5%) and Pseudomyxoma peritonei6 (1.3%) as shown in table 3.

Table: 3 Gynaecological disorders diagnosed in patients

Disorder	N (%)
Pelvic organ prolapsed	112 (24.8)
Genital malignancies	135 (30)
Carcinoma cervix	40 (29.6)
Carcinoma endometrium	35 (25.9)
Carcinoma ovary	32 (23.7)
Carcinoma vulva	28 (20.7)
Benign adnexal masses	47 (10.4)
Endometrial hyperplasia	16 (3.5)
Proliferative endometrium	10 (2.2)
Atrophic endometrium	9 (2)
Endometrial polyp	8 (1.7)
Cervical polyp	8 (1.7)
Vulval papilloma	7 (1.5)
Osteoporosis	7 (1.5)
Pseudomyxoma peritonei	6 (1.3)

The surgical disorders diagnosed in patients were Benign breast mass13 (2.8%), Ductal papilloma7 (1.5%), Carcinoma of breast45 (10%), Stress incontinence15 (3.3%), Urge incontinence12 (2.6%), Post operative fistula10 (2.2%), Urethral strictures3 (0.6%) and Intestinal problems11 (2.4%) as shown in table 4.

Table: 4 Surgical disorder diagnosed in patients

Surgical disorder		N (%)
Breast disorder	Benign breast mass	13 (2.8)
	Ductal papilloma	7 (1.5)
	Carcinoma of breast	45 (10)
Urinary problems	Stress incontinence	15 (3.3)
	Urge incontinence	12 (2.6)
	Post operative fistula	10 (2.2)
	Urethral strictures	3 (0.6)
Intestinal problems		11 (2.4)

Type of surgery performed among patients were VH with PFR 108 (24%), TAH with BSO 99 (22%), Extrafascial hysterectomy 36(8%), B/L salpingoooprectomy 9(2%), Wertheims hysterectomy 9 (2%), Sacrospinous colpopexy with cystocele repair11 (2.4%), Pyometra drainage 45 (10%), Fractional curettage 91 (20.3%), Cervical biopsy 22 (4.8%), Hysteroscopic Biopsy7 (1.5%), Vulvectomy with inguinal lymphadnectomy 3 (0.6%), Pessary 6 (1.3%) and Burch colposuspension 5 (1.1%) as shown in table 5.

Table: 5 Type of surgery performed in gynaecology disorder

Type of surgery	N (%)
VH with PFR	108 (24)
TAH with BSO	99 (22)
Extrafascial hysterectomy	36 (8)
B/L salpingoooprectomy	9 (2)
Wertheims hysterectomy	9 (2)
Sacrospinous colpopexy with cystocele repair	11 (2.4)
Pyometra	45 (10)
Fractional curettage	91 (20.3)
Cervical Biopsy	22 (4.8)
Hysteroscopic Biopsy	7 (1.5)
Vulvectomy with inguinal lymphadnectomy	3 (0.6)
Pessary	6 (1.3)
Burch colposuspension	5 (1.1)

Type of surgery performed in surgical disorders were Lumpectomy 12 (2.6%), Partial mastectomy 8 (1.7%), Segmental mastectomy 20 (4.4%), Mastectomy with reconstruction 25 (5.5%), Intestinal resection with primary anastomosis 6 (1.3%) and Laparoscopy 5 (1.1%) as shown in table 6.

Table: 6 Type of surgery performed in surgical disorders

Type of surgery	N (%)
Lumpectomy	12 (2.6)
Partial mastectomy	8 (1.7)
Segmental mastectomy	20 (4.4)
Mastectomy with reconstruction	25 (5.5)
Intestinal resection with primary anastomosis	6 (1.3)
Laparoscopy	5 (1.1)

Out of 450 patients 338 (75.1%) got completely recovered and no chance of reappearance of symptoms was found as shown in table 7.

Table: 7 follow up period

Outcome	N (%)
Complete recovery	338 (75.1)
Reappearance of symptoms	112 (24.9)

DISCUSSION

Geriatric gynaecology addresses gynaecological disorders found in postmenopausal women aged 65 and older. Indian civilisation, previously characterised by a pyramidal structure until the 20th century, is currently transitioning towards a rectangular configuration, wherein a significant proportion of individuals live to an advanced age and thereafter pass away relatively suddenly within a small age range centred around 85 years. [6] Our achievement in delaying mortality has elevated the upper portion of the demographic profile. The mean life expectancy in India is 68 years. The growth rate of postmenopausal women is significantly higher in developing countries compared to wealthy nations. [7]

In the present study maximum patients were in the age group of 60-65 years (55.5%) and least were in the age group of greater than 75 years (11.1%). This aligns with the research conducted by Dey et al., which indicated that 45.56% of patients admitted to the ward over 60 years of age were within the 60-65 year age bracket. [8]

The most common symptom was postmenopausal bleeding in 44.4%, succeeded by pain and abdominal distention in 41.1%. 33.3% reported the sensation of something emerging from the introitus, 20% indicated vaginal discharge, and 8.8% patients experienced urinary problems (Stress incontinence, Urge incontinence, Post operative fistula, Urethral strictures) , 14.4% had heaviness in breast and 2.4% had intestinal problems . Vaginal discharge (SCOV, 24%) and postmenopausal bleeding (PMB, 31%) were the two predominant presenting complaints in a study done by Sharma T et al .[7] PMB in older women should be regarded as an indicator of potential underlying genital malignancy and necessitates comprehensive evaluation. The distinctive characteristics of geriatric illnesses include chronicity, heterogeneity, increased severity, and a protracted or occasionally absent recovery. There is a clear necessity for a screening programme aimed at the early detection of gynaecological malignancies to enhance geriatric care; however, a lack of data concerning gynaecological morbidity in elderly

women impedes effective planning. Gynaecological disorders in older women differ significantly from those in younger individuals. Elderly women frequently experience vasomotor, urogenital, psychosomatic, psychological symptoms, and sexual dysfunction. [9,10]

The most common gynaecological disorder found in our study were Pelvic organ prolapsed 112(24.8%), Benign adnexal masses 47 (10.4%), Urogenital infections 28 (6.2%) and Urinary incontinence 13 (2.8%). Among malignancies breast carcinoma was found in 45 (10%) patients and other carcinomas found were Carcinoma cervix 40 (29.6%), Carcinoma endometrium 35 (25.9%), Carcinoma ovary 32 (23.7%) and Carcinoma vulva 28 (20.7%). In a study done by Sood N et al the commonest diagnosis was genital malignancy (54.01%) followed by uterovaginal prolapse (30.35%).[11]In their study, Olsen AL et al. demonstrated that the age-specific incidence of genital prolapse rose with age, and that the majority of patients were overweight, postmenopausal, older, and parous. [12] The tissues that make up the pelvic floor are rich in oestrogen receptors. According to Rizk et al., postmenopausal oestrogen insufficiency negatively impacts the pelvic floor support system and biologic ageing. [13]

The risk of developing a gynecological cancer is highest in elderly women.[14] In present study the incidence of genital malignancy was much higher than that reported by other Indian studies. [5,8] In our study among the gynaecological malignancies cervical carcinoma is most prevalent one. This was opposite with the trend increasingly reported from India in which ovarian and corpus uteri malignancies are on the rise in the past two decades.[15] Cancer cervix is the second commonest malignancy seen in females after cancer Breast in India. [16-18]

Patients pelvic organ prolapse underwent definitive surgery, which included sacrospinous colpopexy, enterocele, cystocele, and vaginal hysterectomy with pelvic floor reconstruction. Patients with ovarian cancer, underwent total abdominal hysterectomy, salpingooopherectomy, infracolic omentectomy, and surgical tumor staging. Selected patients received neoadjuvant chemotherapy, and patients with breast cancer was referred to the surgery department for additional care. Every patient with endometrial cancer had pelvic lymphadenectomy and extrafascial hysterectomy. However, some patients with cervical cancer were able to have surgery due to the advanced stage of the disease, which is in line with the observation that older people typically have advanced cervical cancer.[19] Radiation was administered to the remaining patients. This is in line with a study by Ying Gao et al. that found that the most common treatment for elderly patients with cervical cancer was radiation therapy.[20] While the remaining patients were treated conservatively, two patients with stress urine incontinence had surgery using Burch Colposuspension.

The surgical disorders diagnosed among geriartric women in our study were Benign breast mass 13 (2.8%), Ductal papilloma 7 (1.5%), Carcinoma of breast 45 (10%), Stress incontinence 15 (3.3%), Urge incontinence 12 (2.6%), Post operative fistula 10 (2.2%), Urethral strictures 3 (0.6%) and Intestinal problems 11 (2.4%) and surgeries dome for their correction were Lumpectomy 12 (2.6%), Partial mastectomy 8 (1.7%), Segmental mastectomy 20 (4.4%), Mastectomy with reconstruction 25 (5.5%), Uterine drainage 40 (8.8%), Intestinal resection with primary anastomosis 6 (1.3%) and Laparoscopy 5 (1.1%). In a study done by Chawan AP et al [21] 26% of diseases belonged to the biliary system, 20% were hernias, 40% were gastrointestinal systems in that study with 92 patients. In another study, gastrointestinal system (30%) involvement was more commonly involved than Hernia repair surgeries (22%) and biliary tract procedures (13%). [22]

CONCLUSION

The two main reasons for hospitalizations in individuals over 60 are genital cancer and pelvic organ prolapse. A woman's postmenopausal phase is a significant time in her life. Given that aging also becomes a component, the geriatric period is much more significant. An additional challenge is the changes in tissue milieu brought on by aging, which make it harder to apply therapy approaches. Therefore, all gynecologists should strive to care for these women during their reproductive years and beyond. The high prevalence of cervical cancer in our setting highlights the critical need for postmenopausal screening programs.

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