Gynecologic problems among elderly women in comparison with women aged between 45-64 years

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Summary

Background: As women age, they face a variety of co-morbid medical problems as well as gynecologic problems that may differ from those of younger women. Clinicians should know how to screen and manage those problems among elderly women.

Objective: With this background, the study was designed to assess the gynecologic problems on admission among elderly women and women aged between 45-64 years.

Methods: A retrospective analysis of symptom distribution of 200 women aged over 65 years and 200 women aged between 45-64 years from January 1999 to December 2003 was performed in an university clinic.

Participants: Geriatric women and women aged between 45-64 years with gynecologic complaints on admission to outpatient clinics between January 1999 and December 2003. Analyses of demographic data and data related to symptom distribution, using appropriate parametric and non-paramertic statistical tests, were performed.

Results: Geriatric women had a higher number of pregnancies ($p < 0.01$) but lower percentage of hormone replacement therapy use ($p < 0.1$) compared to women aged 45-64 years. No significant difference was observed in terms of the age at menopause. Vaginal fullness was felt most commonly by elderly women ($p < 0.01$) in contrast to menopausal vasomotor symptoms which were relevant in the younger age group ($p < 0.01$). As a clinical diagnosis, pelvic relaxation with uterine prolapse and genital malignancies were the common two diagnoses among geriatric women ($p < 0.05$). Postmenopausal vaginal bleeeding was observed more often among geriatric women compared to women aged 45-64 years (19.5% vs 12%, $p = 0.03$). Endometrial and ovarian cancer distribution did not differ among the two groups when the initial complaint was postmenopausal bleeding.

Conclusion: Type and management of gynecologic problems in women aged over 65 can be challenging and differ from those for younger women. Thus, caring for these women in their reproductive years as well as in later life should be an aim for all obstetrician-gynecologists.

Key words: Geriatric women; Gynecologic problems.

Introduction

The increasing number of elderly women requires a specialized field of gynecology, called 'geriatric gynecology'. Given the fact that, in the senium, women can be faced with several chronic illnesses related to different organs and medical diseases, the role of obstetrician-gynecologists should not be limited to conventional gynecologic disease screening and treatment, which constitutes a challenge [1, 2]. Clinicians should also have knowledge of comorbid medical disorders, perplexing the gynecologic evaluation and treatment of older women.

Regular gynecologic examination in elderly women is an integral part of medical care, just as it is during reproductive years [3]. Appropriate examination and clinical evaluation differ from that for younger women since most older women neglect early symptoms of gynecologic diseases, some of which may be life-threatening. Obstetrician-gynecologists are in a position to maintain the well-being of women as they age.

The aim of this study was to define the symptomatology of elderly women on admision to outpatient gynecologic clinic and, to compare them with those of women aged 45-64 years of age.

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Methods

This retrospective study was composed of 200 geriatric women (group I) and 200 women aged 45 -64 years (group II) admitted to our gynecology clinic with a gynecologic complaint, during the time period January 1999 to December 2003. All information regarding age, parity number and gravidity, coexistant medical problems and clinicopathological diagnosis were retrieved from patient files and hospital records.

Statistical analysis included the Student's t-test and Fisher's exact chi-square test for parametric and non-parametric data evaluation. A statistical package program (SPPS, 11.0, Chicago Ill, USA) was used in data analyses. Continuous variables were expressed as mean ± standard error of mean (SEM). Statistical significance was set at a p value of < 0.05

Results

Mean ages of cases belonging to group I and group II were 70.6 ± 4.5 years and 51.3 ± 5.1 years, respectively ($p < 0.001$). As shown in Table 1, elderly women had higher numbers of parity ($p = 0.04$) and gravidity ($p < 0.001$) compared to the younger age group. Chronic medical problems such as essential hypertension, diabetes mellitus, hyper/hypothyroidism, and combined medical problems were more relevant among elderly women ($p < 0.05$) (Table 1). As an initial complaint on admission, postmenopausal vaginal bleeding ($p = 0.03$) and sense of pelvic fullness ($p < 0.001$) were more relevant in geriatric women compared to women aged 45-64

Table 1. — *Demographic characteristics and co-medical problems among elderly women aged ≥ 65 (Group I) and women between 45-64 years (Group II).*

Parameter	Group I n = 200	Group II n = 200	p value
Age (years)	70.6 ± 4.5	51.39 ± 5.1	< 0.001
Gravidity (n)	6.0 ± 2.8	4.3 ± 2.4	< 0.001
Parity (n)	4.7 ± 3.4	2.9 ± 1.8	0.04
Abortion (n)	1.3 ± 1.5	1.3 ± 1.5	0.61
Living child (n)	3.8 ± 2.0	2.54 ± 1.4	0.33
Age at menopause	46.8 ± 5.2	46.39 ± 4.5	0.74
Hypertension (n,%)	61 (30.5)	35 (17.5)	< 0.001
Diabetes mellitus (n, %)	15 (8)	5 (2.5)	0.02
Chronic obstructive lung disease (n,%)	8 (4)	4 (2)	0.24
Hyper/hypothyroidism (n, %)	3 (1.5)	11 (5.5)	0.02
Hypertension+DM+lung disease (n,%)	27 (13.5)	10 (5.0)	0.003
Others* (n,%)	86 (43)	135 (67.5)	0.02

* renal and gastrointestinal disorders

years. However, vasomotor symptoms were more commonly observed in the younger age group ($p < 0.001$) (Table 2).

Table 2. — *Initial complaints on admission among elderly women aged ≥ 65 (Group I) and women between 45-64 years (Group II).*

Complaint on admission to the clinic	Group I n (%)	Group II n (%)	p value
Menstrual disorders	–	45 (22.5%)	–
Periodic follow-up without any complaints	43 (21.5%)	45 (22.5%)	0.809
Postmenopausal vaginal bleeding	39 (19.5%)	24 (12.0%)	0.038
Feeling of vaginal/vulvar fullness	28 (14.5%)	1 (0.5%)	< 0.001
Abdominal and/or pelvic pain	28 (14.0%)	18 (9.0%)	0.116
Abdominal mass	14 (7.0%)	6 (3.0%)	0.065
Urinary incontinence	14 (7.0%)	15 (7.5%)	0.847
Vaginal discharge	11 (5.5%)	12 (6.0%)	0.830
Vulvar lesions/vulvar pruritus	10 (5.0%)	4 (2.0%)	0.101
Vasomotor symptoms	1 (0.5%)	22 (11.0%)	< 0.001
Others*	12 (6.0%)	8 (4.0%)	0.21

* pelvic pain, back pain or non-specific symptoms

Following appropriate clinical and laboratory evaluations, clinical diagnoses achieved in all cases are summarized in Table 3. Pelvic relaxation, pelvic mass suggesting malignancy and the number of patients on genital cancer follow-ups were more commonly observed among geriatric women. However, cases needing menopause follow-up, with a benign pelvic mass, endometrial polyp, endometrial hyperplasia, and dysfunctional uterine bleeding were abundant in women aged 45-64 years($p < 0.05$).

In elderly women with vaginal bleeding, following surgical intervention (definitive surgery or endometrial biopsy), histopathological results did not differ from those of the younger age group in terms of the nature of the pathology ($p > 0.05$).

Table 3. — *Comparison of clinical diagnoses among elderly women aged ≥ 65 (Group I) and women between 45-64 years (Group II).*

Clinical diagnosis	Group I n (%)	Group II n (%)	p value
Pelvic relaxation	33 (16.5%)	4 (2.0%)	0.001
Pelvic mass (malignant)	33 (16.5%)	11 (5.5%)	0.001
Endometrial/ovarian cancer on follow-up	26 (13.5%)	5 (2.5%)	0.001
Menopausal women on follow-up	11 (5.5%)	57 (27.5%)	0.001
Stress incontinence/ overactive bladder	11 (5.5%)	13 (6.5%)	0.674
Vaginitis/cervicitis	10 (5.0%)	15 (7.5%)	0.301
Urinary infections	8 (4.0%)	3 (1.5%)	0.125
Vulvar lesions	8 (4.0%)	3 (1.5%)	0.125
Other malignancies on follow-up *	5 (2.5%)	4 (2.0%)	0.736
Intraepithelial neoplasia (VIN/CIN)	3 (1.5%)	4 (2.0%)	0.703
Pelvic mass (benign)	2 (1.0%)	19 (9.5%)	0.001
Dysfunctional uterine bleeding	0	19 (9.5%)	< 0.001
Endometrial hyperplasia/ polyp	0 (0.0%)	5 (2.5%)	0.024
Normal genitalia	14 (7.0%)	9 (4.5%)	0.282

* cervical cancer, primary peritoneal carcinoma, vulvar cancer

Table 5 summarizes the cases with initial pelvic pain and their clinical course. As clearly observed, more cases of elderly women with pelvic pain were hospitalized and operated on ($p = 0.03$). Furthermore, genital malignany was a more common diagnosis among geriatric women compared to the younger age group with pelvic pain symptoms ($p = 0.02$).

Table 4. — *Genital malignancies detected following histopathological diagnoses in elderly women aged ≥ 65 (Group I) and between women 45-64 years (Group II) with the complaint of postmenopausal vaginal bleeding.*

	Group I n = 39	Group II n = 24	p value
Total malignancies	24 (61.6)*	13 (54.2)	0.565
Endometrial carcinoma	20	12	0.921
Ovarian/cervical cancer	4	1	0.337
No malignancy	10 (25.6)	6 (25.0)	0.955

* parentheses are column percentages

Table 5. — *Elderly women aged ≥ 65 (Group I) and between 45-64 years (Group II) with an initial complaint of pelvic pain and the clinical course.*

Clinical diagnosis	Group I n = 28	Group II n = 18	p value
Pelvic mass	14 (50.0)*	7 (38.9)	0.455
Non-genital mass	5 (17.9)	6 (33.3)	0.243
Others**	9 (32.1)	3 (27.8)	0.829
Hospitalized	10 (35.7)	2 (11.1)	0.035
Operated on	10 (35.7)	2 (11.1)	0.035
Histopathological results			
Malignancy present	4 (14)	1 (5.5)	0.02
Leiomyoma uteri	1 (3.5)	1 (5.5)	0.166
Pelvic tuberculosis.	1 (3.5)	–	–

* parentheses are column percentages; ** urinary infections, interstitial cystitis, neuromuscular disorders, psychiatric disorders, etc.

More cases of elderly women with urinary incontinence and pelvic prolapse were hospitalized and operated on compared to women aged 45-63 years (p = 0.006) (Table 6). There was no difference depicted between the two groups based on frequency of urinary incontinence and pelvic prolapse.

Table 6. — *Distribution of elderly women aged ≥ 65 (Group I) and women between 45-64 years (Group II) with regard to the percentages of hospitalized and operated cases due to urinary incontinence and pelvic prolapse.*

Clinical diagnosis	Group I n = 14	Group II n = 15	p value
Stress incontinence/ overactive bladder	10 (71.4)*	13 (86.6)	0.307
Pelvic relaxation	2 (14.3)	1 (6.7)	0.502
Others**	2 (14.3)	1 (6.7)	0.502
Hospitalized	3 (21.4)	1 (6.7)	0.006
Operated on	3 (21.4)	1 (6.7)	0.006

* parentheses are column percentages; ** psychiatric disorders, immobility, dementia, chronic medical diseases

Discussion

The results of this study corroborate the fact that elderly women experience a high probability of genital neoplasms as well as associated chronic medical problems.

Again, parity and gravidity numbers tended to decrease towards the younger age group, an important demographic finding in a developing country demonstrating a decline in fecundity in recent years and, to some extent, the efficacy of family planning methods used.

Based on this study, a higher frequency of hormone replacement therapy observed in women aged 45 to 64. The reasons could be the presence of higher vasomotor symptoms in the younger age group, co-morbid medical problems encountered in the geriatric population limiting drug use, and a reluctance to use hormones beyond 60 years or for a long period of time because of fear of cancer [4-6].

Most gynecologic problems associated with elderly women are pelvic incontinence, vulvar and vaginal atrophic changes, and pelvic relaxation with uterine prolapse [3]. In this study, similar findings were observed in terms of the above symptoms. Moreover, bleeding was more common among geriatric women. As shown in Table 1, however, dysfunctional uterine bleeding was the only clinical diagnosis observed in the younger age group, as expected. However, as an initial complaint on admission, postmenopausal bleeding was more common among elderly women (19.5%) compared to the younger age group (12%, p = 0.03) (Table 2). Although the frequency of genital malignancies in the two groups were not statistically different, geriatric women harbored a high percentage of genital malignancies (70.5%). Therefore, gynecologists dealing with elderly women must be cognizant of not only benign gynecologic problems, but also more severe diseases underlying the bleeding which may be more relevant for older ages [7].

As a clinical diagnosis (Table 3) a presumptive diagnosis of a benign pelvic mass and benign endometrial neoplastic lesions were more commonly observed in the younger group. In contrast, as mentioned before, pelvic relaxation and malignant pelvic mass were relevant among the elderly. These findings were in accordance with some observational studies addressing the issue that, in senium, symptoms and clinical diagnoses may differ from those of younger age [8]. Another striking finding in our study was that a high percentage of women undergoing surgery was observed in elderly women with the complaint of pelvic pain. The underlying reason for this finding was the higher number of genital malignancies detected among this age group.

Moreover, more hospitalization and urogynecologic operations were performed in women of younger ages (Table 6). This finding was also relevant since the diagnosis and management of urologic symptoms in the elderly can be challenging [9]. Drug use, co-morbid medical diseases such as chronic obstructive lung diseases, dementia, and prolonged immobility may lead to functional urinary incontinence, complicating the clinical diagnosis as well as the chance of operability.

To conclude, genital malignancies and chronic medical disorders are more common among elderly women. Increased prevalence of genital malignancies necessitating interventions with high morbidity is challenging in this age group. Consequently, clinicians should be vigilant of the presence of chronic medical diseases. In addition, they should have proper skills in dealing with therapeutic complications associated with genital pathologies.

Differences in symptoms and clinical diagnoses of geriatric women on admission should be recognized and appropriate measures such as cancer screening, close clinical follow-up with life-style counseling including exercise and diet have to be taken to prevent the elderly from suffering from the preventable and debilitating diseases of old age.

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