

Gynecological Pathology among Elderly Women

Anis Haddad¹, Olfa Zoukar², Imen Gaddab³, Amira Daldoul⁴, Sonia Hammami⁵, Ines Zaabar⁶,
Sonia Zaied⁷, Raja Faleh⁸

^{1, 2, 3, 6, 8}Department of Gynecology and Obstetrics, El Omrane Hospital of Monastir

^{4, 7}Department of Medical Oncology, Fattouma Bourguiba University Hospital of Monastir

⁵Department of Internal Medicine, Fattouma Bourguiba University Hospital of Monastir

Abstract: *In recent years, there has been an increasing interest in the health of elderly people. Yet, in developing countries, very few studies have been devoted to these pathologies. It was in this background that we decided to carry out this study dealing with all the pathologies of elderly woman. Therefore, our objectives are to list the geriatric gynecological pathologies of our population and to study the peculiarities and the management of each pathology. **Methods:** This is a retrospective descriptive study carried out at the Monastir Maternity Center over a period of 11 years from January 2003 to December 2013. This study involved 269 women aged over 65 years and having gynecologic pathology. **Results:** The average age of our patients was 70.6 ± 5.6 years. In our patients, the gynecological pathologies were dominated by cancers (46.1%) followed by benign conditions (27.1%) and pelvic static disorders (26.8%). The breast pathology group consists of 92 women (34.2%), including 77 breast cancers (83.6%) and 15 benign conditions (16.4%). Other cancers group comprises 47 women. These are 15 (31.9%) cervical cancers, 14 (29.7%) endometrial cancers, 9 (19.1%) vulvar cancers, 7 (14.9%) ovarian and 2 (4.2%) vaginal cancers. The pelvic static disorders group is made up of 72 women. The group of other pathologies was made up of 58 women including 32 uterine, 17 ovarian and 9 cervical affections. **Conclusion:** We insist on the need to create structures providing comprehensive care for elderly women.*

Keywords: Aged, breast neoplasms, genital diseases, surgical procedures, anesthesia

1. Introduction

Nowadays, the health of elderly people has become a major area of interest within the medical community. Demographic projections indicate that the number of people aged 65 and over will be on the rise for decades to come, thus, more strain will be put on health care authorities to meet their increasing health care services. Since the beginning of the 20th century, demographic data have announced that the number of women has exceeded that of men for all age groups (1). In addition, life expectancy has increased significantly, for example, in America there has been a rise of 18 years for women aged 65. As a result, women aged 65 make up over 20% of the American female population(1). In Tunisia, the elderly population, which was 9% in 2003, rose to 9.5% in 2009 and is expected to reach 17% in 2029(2). The early interest in geriatric gynecological pathology in Western countries has been emphasized by various publications on this subject(3–5). However, in Tunisia and for years the interest in gynecological pathology has been centered more on the gynecologically active women than on elderly women. This is underlined by health programs aimed primarily at promoting the health of mothers and children.

In the context of lack of national reference concerning geronto-gynecology, we decided to carry out this work which is the first in Tunisia to deal with and catalog all the pathologies of elderly women and which aims to:

- List the geriatric gynecological pathologies of our population;
- Study the peculiarities and the management of each pathology

2. Materials and Methods

This is a retrospective descriptive study carried out at the Monastir Maternity Center over a period of 11 years from January 2003 to December 2013. After oral consent, we included 269 women aged over 65 years and having gynecologic pathology. We excluded all women under the age of 65 and those whose files lacked key pieces of information.

The variables studied were: age at diagnosis, family and personal history, parity, reason and time for consultation and treatment.

Statistical analyses were performed using SPSS 18.0 statistical software package. Conventional formulae were used to calculate the mean and standard deviation.

3. Results

Our patients were classified into 4 groups: a breast pathology group, a pelvic cancers group, a pelvic static pathology group, and a group of other pathologies. The average number of hospitalizations was 30 women per year. It was 35.5% of total admissions per year. The average age of our patients was 70.6 ± 5.6 years [65 - 89 years]. The average length of hospital stays in elderly women was 17.2 days. Co-morbidities, mainly arterial hypertension, diabetes and heart disease, were found in 72.5% of our study population. In our patients, the gynecological pathologies were dominated by cancers (46.1%) followed equally by benign conditions (27.1%) and pelvic static disorders (26.8%). Breast cancers were the most common, followed by the cervical cancer and endometrial cancer. For benign pathologies, uterine disorders were the most frequent followed by those of the breast and the ovaries.

The breast pathology group consists of 92 women (34.2%), including 77 breast cancers (83.6%) and 15 benign conditions (16.4%). Breast cancer was discovered at an average age of 72.5 ± 6.6 years [65 - 89 years]. The average consultation time was 5.2 months. Tumors ranked T2 were more frequent (54.5%) followed by those classified as T4 with a poorer prognosis (37.7%). Lymph node invasion was predominantly N0 and N1 and metastases were found in 5.3% of cases. Histopronostic grades SBR III were the least frequent (22.7%). Hormonal receptors were positive for estrogens in 64.7% of cases and progesterone for 48.6% of cases. Surgical treatment was performed in 73 patients. Adjuvant treatment was prescribed for 67 women (86%). Among the 72 patients who underwent surgery, the complication rate was 16.6%.

Other cancers group comprises 47 women. These are 15 (31.9%) cervical cancers, 14 (29.7%) endometrial cancers, 9 (19.1%) vulvar cancers, 7 (14.9%) ovarian and 2 (4.2%) vaginal cancers. The mean age of the pelvic cancers group was 71.3 ± 5.7 years [65 -85 years]. The average length of stay was 30.2 ± 16.6 days [6 - 65 days]. The average consultation time was 121 ± 71 days [0 - 720 days]. Postmenopausal metrorrhagia, found in 31 women (65.9%), was the main chief complaint. Cancers were discovered in stages 3 and 4 in 52.2% of cases. Advanced stages were clearly common for ovarian and vaginal cancers, while vulvar cancers were discovered at early stages. Of the 47 pelvic cancers, 24 did not undergo surgery due to advanced stages or to patient fragility.

The pelvic static disorders group is made up of 72 women. The mean age of these patients was 69.5 ± 4.9 years [65 - 85 years]. The average parity for this group was 7.3 ± 3 [2 - 17]. The average consultation time was 555 ± 371 days [0 - 1440 days]. The average stay time was 10 ± 7.3 days [1 - 40 days]. Concerning the chief complaint, stress urinary incontinence associated with the feeling of heaviness was noted in 40 (55.5%) patients. The cystocele, the hysterocele and the rectocele were found with respective frequencies of 97.3%, 87.5% and 80.5%. Women had consulted at advanced stages. Among the 72 women: 54 (75%) women had triple perineal operation, six (8.3%) women underwent surgical treatment of stress urinary incontinence by implantation of a transobturator sub-urethral band. It was stress urinary incontinence associated with grade I to II prolapse; four (5.5%) women had promontofixation-Bursh type intervention; 2 (2.7%) women underwent a cure of cystocele associated with a cure of rectocele, one (1.38%) woman had an isolated rectocele cure, one (1.38%) woman was treated by putting a pessary, 4 (5.5%) women were not operated because of inflammatory and infectious condition of the cervix. They received antibiotic treatment after cervical biopsy and outgoing appointments. The postoperative course was simple for 61 (85.9%) women. In addition, there were 4 (5.5%) infections of the wound, 2 (2.7%) urinary infections and decompensation of asthma.

The group of other pathologies was made up of 58 women including 32 uterine, 17 ovarian and 9 cervical affections. The mean age of patients in the other pathology group was 69.6 ± 5.1 years [65 - 86 years]. The average consultation time was 69 ± 64 days [0 - 540 days]. The average stay time

was 9.1 ± 8.9 days [1 and 49 days]. Histologically, benign tumors were the most frequent followed by infectious pathology and trophic disorders found respectively for 35, 12 and 11 lesions.

4. Discussion

Elderly women have health problems that negatively affect their quality of life. Many of these problems are associated with underlying gynecological conditions, hence, a good interview and a gynecological examination are of great importance to detect and treat these affections in time. However, despite the great medical advances made over the last few decades, many of the etiologies of postmenopausal metrorrhagia remain poorly understood. Surgery is still, in many cases, the cornerstone in the treatment of gynecological cancers or genitourinary prolapse. However, as co-morbidities also increase with age, the main concern will become the feasibility of gynecological treatments.

Due to the aging of the population, the increase in life expectancy as well as the increasing incidence of cancer with age, elderly women represent a large proportion of breast cancer patients. Thus, more than 50% of cancers occur today in women aged 65, and more than 30% in women over 70 (6,7).

Benign breast disorders in elderly women account for 1.5% to 2% of benign breast diseases in women of all ages (8,9). Amr et al(10) reported mainly 5 fibrocystic mastopathies, 1 breast abscess and 1 fibroadenoma all discovered at 65 to 70 years of age. In our series, the age of discovery of these conditions did not exceed 75 years. Abscesses and fibrocystic mastopathy were the most frequent histological diagnoses. Bed occupancy was 10 days on average.

The risk of developing gynecological tumors is greater in elderly women. Compared to women aged 40 to 65 years, those over the age of 65 are at a higher risk of developing cancers of the uterus (2-fold), of the ovaries (3-fold), and of the cervix (a 10% greater risk)(11). According to the studies of Takkar and Vertier(12,13), pelvic gynecological cancers accounted for 17% and 27.7% of the pathological diseases in elderly women. In our series, these cancers constituted 17.5% of the pathologies in elderly woman. These results are closer to those of Vertier because Takkar included women aged over 60 years.

The proportions of affected organs (cervix, uterus, ovaries, vulva and vagina) are variable in the literature. In fact, uterine cancers seem to be the most common in American and European series, followed by cervical, ovarian, vulvar and vaginal cancers(13,14). In the Indian series of Takkar, cancer of the uterus comes in third place after those of the cervix and the ovaries (12). Ethnic reasons, as well as the difference in screening and prevention tools between rich and poor countries, may explain this disparity. In our series, the affected organs in order of frequency were as follows: the cervix followed by the uterus, vulva, ovaries and vagina. Compared with those of young women, gynecological cancers in elderly women tend to be diagnosed at a more advanced stage, which is attributed to their failure to undergo routine gynecologic examinations and screening

procedures and to psychological considerations in addition to elderly women's lack of awareness of gynecological health problems(15).For some authors, there are more late stages (III or IV) than early stages (I or II) in elderly women's cancers(12,13,15). However, Susini (16) and Kennedy (17)reported in their series early stages at rates of 53% and 57.6%, respectively.

The prevalence of genital prolapse is poorly known. In Quebec, urogenital prolapse accounts for 13% of indications for hysterectomies and about 500,000 procedures a year in the United States. The cumulative risk of surgery for pelvic static disorder increases with age, reaching 11.1% at age 80 (18).

The other gynecologic pathologies are rarely studied comprehensively in elderly women. This is due to the differences in the authors' methodologies and to the fact that the distinction in gynecological pathology is between menopausal and non-menopausal women without really focusing on the specificity of elderly woman. Indeed, Takkar et al (12) studied the gynecological pathologies of elderly women except for breast disorders and grouped 50 infections as part of urogynecological infections without giving details.

These pathologies account for a large proportion of gynecological problems in elderly woman. Indeed, this group of affection constituted 30% of the gynecological pathology of women hospitalized in the series of Vertier (13) and 39.4% in the series of Takkar(12). In our series, this group comprised 21.6% of the total population.

Advanced age is characterized by a gradual decline in the functional reserves of most organs. The choice of anesthesia (general or loco regional anesthesia, type of drug, blood transfusion) requires a good preoperative evaluation and will depend on the associated diseases, current treatments and current pathology (19).

Then, a postoperative follow-up will be necessary to fight the pain and to prevent complications. Age itself is not an impediment to effective anesthesia, but preoperative anesthetic evaluation is important in order to best determine the elderly patient's abilities to cope with the surgical risks (20).

In our series, the use of general anesthesia was 87.6%. Interventions under spinal anesthesia were carried out in 29 women that were 12.4% of all the interventions and 50% of the other pathology group.

The cost of care for gynecological pathologies in elderly women has not been sufficiently dealt with in the literature.

This cost is not only related to the acts performed but also to the explorations that precede them and the pre- and postoperative resuscitation(21).

Cain et al(22)reported higher costs related to more prolonged thromboprophylaxis in elderly women compared to those in young women. Additional extra costs would result from high postoperative morbidity (21). The higher

costs of laparotomy compared to laparoscopy would result in higher morbidity (23).

Max et al (24) studied the medical care costs of pelvic cancers. They found that the cost of ovarian cancer was the highest followed by cervical cancer and endometrial cancer. (Table I)

In our series, if we multiply the cost per inpatient day (50 dinars) by the average length of stay (17.2 days) the average cost would be 850 dinars per woman.

Table I: cost of pelvic cancers care according to age (24)

	Ovarian Cancer	Cervical Cancer	Endometrial Cancer
Before 65 years	11000 \$	8200 \$	7445 \$
65-74 years	16549 \$	9273 \$	7661 \$
After 75 ans	13975 \$	7310 \$	7625 \$

5. Limitation

It is a retrospective study that may introduce selection bias.

6. Conclusion

We insist on the need to create structures providing comprehensive care for elderly women. The authors declare that there is no conflict of interest regarding the publication of this paper.

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