



ISSN:2230-9926

Available online at <http://www.journalijdr.com>

**IJDR**

**International Journal of  
DEVELOPMENT RESEARCH**

*International Journal of Development Research*  
Vol. 4, Issue, 3, pp. 474-476, March, 2014

### **Full Length Research Article**

## **DIFFERENCES OF ENDOMETRIAL BIOPSY RESULTS AMONG POSTMENOPAUSAL AND REPRODUCTIVE AGE GROUPS**

**<sup>1</sup>Serdar Yanık, <sup>2\*</sup>Ozan Turgut, <sup>3</sup>AybalaAgac Ay, <sup>4</sup>SelcukMisirligil and <sup>5</sup>Ahmet Ay**

<sup>1</sup>Iskenderun State Hospital, Pathology Department, Hatay, Turkey

<sup>2</sup>Iskenderun State Hospital, Gynecology Department, Hatay, Turkey

<sup>3,4</sup>Kirikkale University, School of Medicine, General Surgery Department, Kirikkale, Turkey

<sup>5</sup>KirikkaleYuksekihtisasHospital, General SurgeryDepartment, Kirikkale, Turkey

#### **ARTICLE INFO**

##### **Article History:**

Received 12<sup>th</sup> December, 2013

Received in revised form

22<sup>nd</sup> January, 2014

Accepted 19<sup>th</sup> February, 2014

Published online 05<sup>th</sup> March, 2014

##### **Key words:**

Postmenopausal,  
Reproductive eage,  
Endometrium,  
Pathology.

#### **ABSTRACT**

The aim of this study is to compare the different endometrial histopathologies among cases from postmenopausal to reproductive ages. From January 2011 through November 2013, 114 postmenopausal women and 100 randomly allocated reproductive age group cases were compared, on the basis of endometrial histopathological findings obtained from the archives of Pathology Department. In our research the most common histopathologic diagnosis in reproductive age group is secretory endometrium (%25) and also this is the most common result in postmenopausal age (%20.17). Proliferative endometrium is the second most common result in reproductive age and endometrial polyp (%12), endometrial hyperplasia (%21), hormone replacement therapy changes (%3) and endometrium cancer (%1) case seen in this group of age. Endometrial polyp (%20.17) is the other most common histopathologic result in postmenopausal period and there is a significantly statistically difference in reproductive age (%12). In postmenopausal group endometrial atrophy (%2.64), endometrial polyp (%20.17), endometrial hyperplasia (%31.58), hormone replacement therapy changes (%0.87) and endometrium cancer (%6.14) listed. Endometritis is more common in reproductive age (%16) than postmenopausal age (%8.78). Endometrial hyperplasia, endometrial carcinoma and other pathologies like chronic endometritis, endometrial polyp, hormone imbalance effect and proliferative endometrium were also diagnosed with accuracy as the patients present with complaints of menorrhagia which compels clinician to investigate the cause of disease promptly.

Copyright © 2014. Serdar Yanık et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

#### **INTRODUCTION**

The ovary and endometrium have atrophy differences through geriatric age and in these group of women vaginal bleeding needs clinical assessment (Özalp 2004). It is important to assure that only 10% of those presenting with postmenopausal bleeding will have endometrial cancer (Munot 2008). Although it is a worrying symptom, there are far more likely benign causes. Nearly 90% of women with endometrial cancer presents with vaginal bleeding. The risk of malignancy associated with an episode of bleeding increases with age: only 1% of women at age 50 compared with %25 at age of 80 years will have the disease (Munot 2008, Schwarzler 1998). The aim of this study is to compare the different endometrial histopathologies among cases from postmenopausal and reproductive age group (15-49 ages).

#### **MATERIALS AND METHODS**

Recruitment took place from January 2011 through November 2013, postmenopausal women and reproductive age group cases were compared on the basis of endometrial histopathological findings obtained from the archives of Pathology Department. Chi-square method and Fisher's exact tests were used for most of the analysis. Statistical analysis was performed using SPSS 2007 version. Dilatation curettage materials due to termination of pregnancy and hysterectomy materials were not included to research specimens. Endometrial curettage, dilatation and curettage biopsy derived from pipelle materials were mainly included to probe. SPSS for statistical analysis (0.8.1) computer program was used to package. Non-parametric findings were evaluated with Fisher's exact chi-square test.  $P < 0.05$  were considered statistically significant

**\*Corresponding author: Ozan Turgut,**

Iskenderun State Hospital, Gynecology Department, Hatay, Turkey

## RESULTS

The mean age of postmenopausal group is 54.46±5.54 and reproductive age is 41.94±6.07. The most common histopathologic diagnosis in reproductive age is secretory endometrium (25%) and this is also the most common result in postmenopausal age (20.17%) (p=0.39) (Table 1). Proliferative endometrium is the second most common result in reproductive age and endometrial polyp (12%), endometrial hyperplasia (21%), hormone replacement therapy changes (3%) and endometrium cancer (1%) rates verified in this age group. Endometrial polyp (20.17%) is the other most common histopathologic result in postmenopausal age and there is slightly statistically difference in reproductive age (12%) (p=0.11). In postmenopausal group we have endometrial atrophy (2.64%), endometrial polyp (20.17%), endometrial hyperplasia (31.58%), hormone replacement therapy changes (0.87%) and endometrium cancer (6.14%) cases. Endometritis is more common in reproductive age (16%) than postmenopausal age (8.78%) (p=0.11).

**Table 1. Endometrial histopathologic diagnosis of postmenopausal and reproductive age groups**

Histopathologic Diagnosis	n	%	n	%	p value
Atrophic endometrium	0	0	3	2.64	
Proliferative endometrium	20	20	11	9.65	0.03
Secretory endometrium	25	25	23	20.17	0.39
Hormone effect	3	3	1	0.87	0.25
Endometritis	16	16	10	8.78	0.11
Endometrial polyp	12	12	23	20.17	0.11
Endometrial hyperplasia	21	21	36	31.58	0.08
-Simple	19	19	21		
-Complex	2	2	15		
Malignancy	1	1	7	6.14	0.04
TOTAL	100	100	114	100	
Reproductive Age (15-49 age)			Postmenopausal Age (≥50 age)		

## DISCUSSION

In this study the most common endometrial diagnosis in postmenopausal age is secretory endometrium and endometrial polyp. Endometrial cancer results quite are in our study. In reproductive age, the most common endometrial diagnosis are benign conditions. Endometrial atrophy (60-80%), endometrial polyp (2-12%), endometrial hyperplasia (5-10%), hormone replacement therapy changes (1.5-25%) and endometrium cancer (10-17%) were the most common endometrial pathologies found from postmenopausal women. 1,4. Özalp S et al. have findings of endometrial atrophy (10%), endometrial polyp (32%), endometrial hyperplasia (4%), and endometrium cancer (49%) rates in geriatric age groups. In our study we have findings of endometrial atrophy (2.64%), endometrial polyp (20.17%), endometrial hyperplasia (31.58%), hormone replacement therapy changes (0.87%) and endometrium cancer (6.14%) cases. Cancer and endometrial hyperplasia rates of our study are significantly different in postmenopausal age groups. With the increased use of ultrasound, hysterosonography, and hysteroscopy in the

evaluation of women with abnormal uterine bleeding or postmenopausal bleeding, the diagnosis of endometrial polyps has become more frequent in the last few years (Lucia 2011). Polyps are found in up to 12% of asymptomatic women in routine examinations and the prevalence rate of endometrial polyps ranges from 10% to 40% in women with abnormal uterine bleeding (Anastasiadis, 2000, Clevenger-Hoefl 1999, Goldstein 1997, Nagele 1996, Van Bogaert 1998, Dreisler 2009, Lieng 2009). Özalp et al. researches 63 (31.5%) proliferative endometrium, 46 (23%) secretory endometrium, 22 (11%) endometrial polyp, 8 (4%) endometrial hyperplasia, and 1 (0.5%) endometrium cancer rates in 200 reproductive age cases. In our study we have 20 (20%) proliferative endometrium, 25 (25%) secretory endometrium, 12 (12%) endometrial polyp, 21 (21%) endometrial hyperplasia, and 1 (1%) endometrium cancer (1%) rates in reproductive age group. Endometrial biopsy is found most accurate process in diagnosing endometrial carcinoma and having same accuracy of endometrium material obtained from hysterectomy operation (Saadia 2011). Endometrial hyperplasia, endometrial carcinoma and other pathologies like chronic endometritis, endometrial polyp, hormone balance effect and proliferative endometrium were also diagnosed with accuracy as the patients present with complaints of menorrhagia which compels clinicians to investigate the cause of disease promptly.

## REFERENCES

- Anastasiadis PG, Koutlaki NG, Skaphida PG, Galazios GC, Tsikouras PN, Liberis VA. Endometrial polyps: prevalence, detection, and malignant potential in women with abnormal uterine bleeding. *Eur J Gynaecol Oncol.* 2000; 21: 180-3.
- Clevenger-Hoefl M, Syrop CH, Stovall DW, Van Voorhis BJ. Sonohysterography in premenopausal women with and without abnormal bleeding. *Obstet Gynecol.* 1999; 94: 516-20.
- Dreisler E, Stampe SS, Ibsen PH, Lose G. Prevalence of endometrial polyps and abnormal uterine bleeding in a Danish population aged 20-74 years. *Ultra sound Obstet Gynecol.* 2009; 33: 102-8.
- Fortier KJ. Postmenopausal bleeding and the endometrium. *Clin Obstet Gynecol.* 1986; 29: 440-5.
- Goldstein SR, Zeltser I, Horan CK, Snyder JR, Schwartz LB. Ultrasonography-based triage for premenopausal patients with abnormal uterine bleeding. *Am J Obstet Gynecol.* 1997; 177: 102-8.
- Lieng M, Istre O, Sandvik L, Qvigstad E. Prevalence, 1-year regression rate, and clinical significance of asymptomatic endometrial polyps: cross-sectional study. *Journal of minimally invasive gynecology.* 2009; 16(4): 465-71.
- Lucia C. Risk of Malignancy in Endometrial Polyps in Premenopausal and Postmenopausal Women According to Clinicopathologic Characteristics. *Menopause.* 2011; 18(12): 1278-82.
- Munot S, Lane G. Modern management of postmenopausal bleeding. *Trends in Urology Gynaecology & Sexual Health* September/October 2008 p20 Menstrual problems
- Nagele F, O'Connor H, Davies A, Badawy A, Mohamed H, Magos A. 2500 outpatient diagnostic hysteroscopies. *Obstet Gynecol.* 1996; 88:87-92.

Özalp S, Tanır HM, Öner Ü, Yıldırım A, Işıksoy S, Kahraman S. Comparison of endometrial pathologies among cases from geriatric and reproductive age groups. *Turkish Journal of Geriatrics*. 2004; 7 (3): 128-30

Saadia A. Diagnostic accuracy of endometrial curettage in endometrial pathology. *J Ayub Med Coll Abbottabad*. 2011; 23(1):1-4

Schwarzler P, Concin H, Bosch H. An evaluation of sonohysterography and diagnostic hysteroscopy for the assessment of intrauterine pathology. *Ultrasound Obstet Gynecol* 1998; 11: 337-42.

Van Bogaert LJ. Clinicopathologic findings in endometrial polyps. *Obstet Gynecol*. 1998; 71: 771-3.

\*\*\*\*\*