

Histological study of endometrial biopsies (D&C) in 2007.

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الخلاصة

تعتبر دراسة التغيرات النسيجية التي تحدث في بطانة الرحم من اكثر الدراسات اهمية في الجهاز التناسلي الأنثوي وذلك لدراسة احتمالية حدوث اورام خبيثة لبطانة الرحم للنساء اللواتي حدث لهن نزيف غير طبيعي. تضمنت الدراسة جمع (130) عينة من بطانة الرحم مع معرفة كافة المعلومات السريرية لتلك العينات. اظهرت النتائج بأن اكثر عمليات الكورتاج (توسيع عنق الرحم وكحت بطانته) حدثت في الفئة العمرية (20- 29). لوحظ ان اكثر عمليات الكورتاج حدثت في النساء قبل سن اليأس, كما لوحظ بأن اكثر عمليات الكورتاج حدثت في الطور التكاثري غير الافرازي (الوسط) لبطانة الرحم مقارنة مع عمليات الكورتاج التي حدثت في الطور الافرازي . كما اجريت دراسة نسيجية مرضية لبطانة الرحم للنساء قبل سن اليأس والنساء بعد سن اليأس فلوحظ بأن التغيرات النسيجية لبطانة الرحم كانت طبيعية اكثر من النساء في ما بعد سن اليأس. كما لوحظ بأن عدد النساء اللواتي حصل لهن اجهاض غير كامل أي وجود بقايا زغابات مشيمية في بطانة الرحم كان اكثر من وجود بقايا انسجة اخرى . كما لوحظ وجود اورام حميدة من نوع الزوائد اللحمية في النساء قبل سن اليأس اكثر من نساء بعد سن اليأس اما بالنسبة الى حدوث التضخم في النساء بعد سن اليأس كان اكثر من النساء قبل سن اليأس . كذلك لوحظ وجود اورام سرطانية في بطانة الرحم في النساء بعد سن اليأس اكثر مقارنة مع وجود حالة واحدة لسرطان بطانة الرحم في نساء قبل سن اليأس .

Abstract

The aim of present study was carried out firstly to find out the causes for abnormal uterine bleeding in women at Najaf city and secondly to compare the histopathological findings between the premenopausal and postmenopausal women . the total number of cases was 130 women with abnormal uterine bleeding. it has been found that the most frequent age group presentation for D&C was (20-29) years. Premenopausal women for D&C were the most frequent than postmenopausal women . It has also been found that no significant deference between non secretory and secretory phases in two groups of women. Histopathological diagnosis of D&C into normal , retained gestation product , benign and malignant also studied .

Introduction

The dilatation and curettage procedure is called a D & C . The D stands for dilatation , which means enlarging . The C stand for curettage means scraping . Together , this procedure involves expanding or enlarging the entrance of a women uterus so that a thin , sharp instrument can scrape or suction away the lining of the uterus and take tissue samples .^(1,2)

D&C may stop bleeding for a little while (2-6 months) then the prior abnormal bleeding tends to return .⁽³⁾

Many gynecological examinations , especially those related to be normal vaginal bleeding , warrant study of the endometrium . traditionally , the standard method of assessing the endometrium has been dilatation of the cervix and curettage of the uterine cavity .⁽⁴⁾

Abnormal uterine bleeding (AUB) is a single most common reason for gynecological referrals , while there are various benign reasons for AUB , abnormal post menopausal bleeding is associated with endometrial cancer in 10% of cases .⁽⁵⁾ (AUB) is one of the most common problems in the permenopausal age group . the causes for the bleeding are hormonal , pregnancy complications , bleeding diathesis and more importantly local pathology including malignancy , benign tumors , and infection .⁽⁶⁾ the bleeding in per menopausal period may be secondary to estrogen with drawl (physiological state) in some cases it may be due to malignancy of the reproductive organs , particularly in post menopausal women .⁽⁷⁾

One stimulation is an incomplete miscarriage or even full-term delivery when the uterus has not pushed out all the fetal or placental tissue inside of it. If tissue is left behind , excess bleeding can result .⁽⁸⁾

The D&C procedure has traditionally been considered as standard for the investigation of AUB . however several disadvantages of D&C have led investigators to look for alternatives to this procedure , the two main disadvantages are that in most cases D&C in performed under general anesthesia , and that it is a blind procedure .⁽⁹⁾ In one study , 60% of patients had less than half the uterine cavity curetted and 16% had less than a quarter .⁽¹⁰⁾

Although group of the researchers used D&C as a gold standard the another researchers considered the hysteroscopic surgery is a safe and effective for post menopausal women with benign intrauterine lesions . In a recent prospective study it was shown that curettage alone is not sufficient for detection and extraction of endometrial polyp (EMP) .curettage alone detected EMP in only22 of 51 patients with polyps diagnosed by hysteroscopy .⁽¹¹⁾

The aim of this study to know the causes for the abnormal uterine bleeding in women at Najaf city and to exclude intrauterine pathology , particularly endometrial cancer and to determine the histo pathological pattern of lesions associated with abnormal uterine bleeding in different age groups .

Materials & methods

The study comprised of (130) women, all women undergoing D&C of one year from 1/1/2007 to 31/12/2007. Their indications for D&C were pre menopausal abnormal bleeding, post menopausal bleeding.

Various characteristics of the patients including age, menopausal status and histopathological findings. Endometrial biopsies were collected by D&C and their clinical data were collected from these women .histological preparations were down at Sader teaching hospital and studied in the pathology department, college of medicine, Kufa University. Processing in serious of alcohol, xylol and then paraffin blocks then sectioning in 5M and staining with hematoxylin and eosine all were down. Statistical analysis using T-test for these data was applied.

Results

There are One hundred and thirty women were included in this study, their ages ranged from 10 to 79 years . the mean age was 45 year . the most frequent age group presentation for D&C was (20-29) year (40 out of 130) Table (1) .

It has been found that D&C of pre menopausal was the most frequent presentation than post menopausal Table (2) . It has also been found that there was significant deference between the secretary and non secretary phases when we studied the menstrual status during D&C Table (3) .fig (1 , 2) .Histo pathological diagnosis of D&C revealed that normal endometrium formed (77.67 %) in pre menopausal women while formed (59.26 %) in post menopausal women with the significant deference ($P < 0.05$) , also the placenta villi as a retained gestation product formed (7.77 %) while the decidual product formed (3.89 %) in pre menopausal women . fig (3) .

Endometrium polyp as a benign formed(6.79 %) while endometrium hyperplasia formed (2.91%) in pre menopausal women but these percentages were lower than the percentages of post menopausal women(18.52%) ,(14.82%) respectively . It has been found the endometrium adenocarcinoma formed (0.97%) in pre menopausal while formed (7.40 %) in post menopausal women Table (4) . fig (4,5,6).

Table 1: Age distribution frequency of D&C.

Age(yrs)	NO.	%
10 – 19	5	3.84
20 – 29	40	30.76
30 – 39	23	17.69
40 – 49	35	26.94
50 – 59	14	10.76
60 – 69	10	7.69
70 – 79	3	2.32
Total	130	100

Table 2: Indication of menopausal women frequency of D&C.

Menopause	NO.	%
Pre menopause	103	79.24
Post menopause	27	20.76
Total	130	100

Table 3: Menstrual status of D&C.

phase	NO. non secretary*	%	NO. secretary*	%	Total	%
early	19 fig(1)	30.64	10	24.39	29	28.15
Mid	27 fig(2)	43.54	14	34.75	41	38.83
Late	16	25.82	17	41.46	33	33.02
Total	62	100	41	100	103	100

* S P< 0.05

Table (4) : histopathological diagnosis of D&C .

Lesions	diagnosis	NO.pre*menopause	%	NO.post*menopaus e	%	Total	%
Normal	Normal	80	77.67	16	59.26	96	73.63
Retained gestation product	Placenta villi fig(3)	8	7.77	-	-	8	6.14
	Deciduas product	4	3.89	-	-	4	3.65
Benign	Polyp fig(4)	7	6.79	5	18.52	12	9.12
	Hyperplasia fig(5)	3	2.91	4	14.82	7	5.26
malignant	Adeno carcinoma fig(6)	1	0.97	2	7.40	3	2.20
Total		103	100	27	100	130	100

*S $p < 0.05$

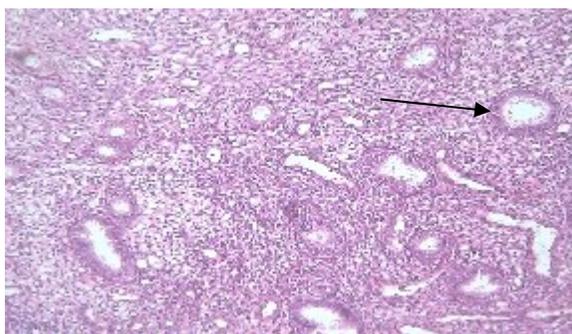


Fig (1): represents proliferative phase (early)

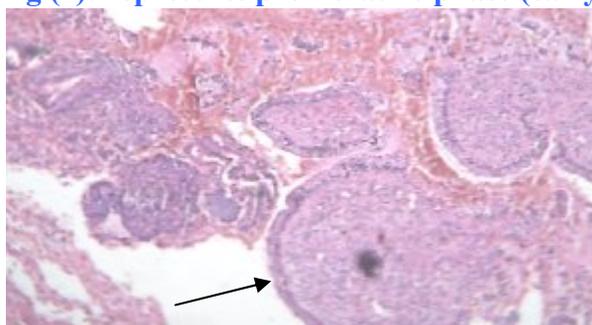


Fig (2): represents (mid) phase

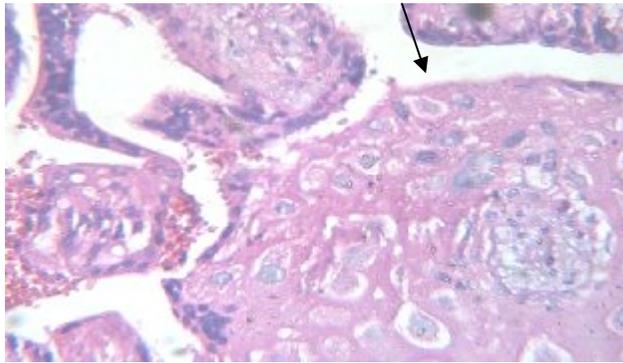


Fig (3): represents retained gestation products

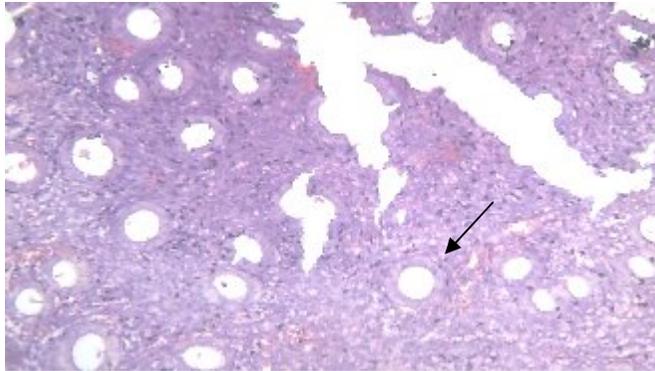


Fig (4): represents benign (polyp)

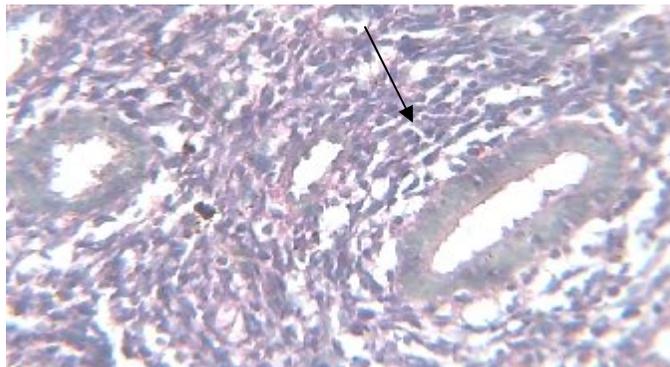


Fig (5): represent benign (hyperplasia)

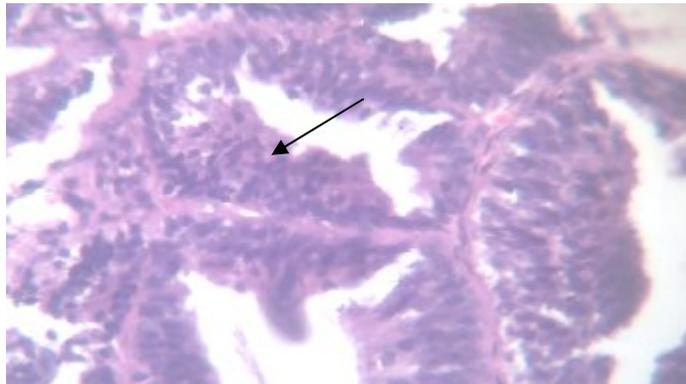


Fig (6): represents malignant (adenocarcinoma)

Discussion

Abnormal endometrium bleeding without structural pathology occur in reproductive women of all ages but is more common in premenopausal women.⁽¹²⁾ In the perimenopausal years menstrual cycles often become irregular due to the decreased number of ovarian follicles and then increased resistance to gonadotrophic stimulation , resulting in a low level of estrogen, which cannot keep the normal endometrium growing . As the women get older the incidence of structural abnormality including malignancy increases .^(13 ,14) In this study 8 (7.77%) of the women were histopathologically positive for gestational remnants .when miscarriage incomplete abortion , child birth , abnormal bleeding may result if some of the product of pregnancy remain in the uterus after a miscarriage or induced abortion , or if parts of the placenta are not expelled naturally after child birth .these retained product can be scraped out by D&C .⁽⁶⁾

D&C is currently the initial diagnostic procedure in the evaluation of post menopausal bleeding in our institution, recent studies indicate that D&C can identify 80% of cases of endometrium cancer.

Endometrium cancers are the most common gynecologic cancers and may sometimes be referred to as uterine cancer. However, different cancers may develop not only from the endometrium itself but also from other tissues of the uterus, including cervical cancer, sarcoma of the myometrium, and trophoblastic disease. ⁽¹²⁾ most endometrium cancers are carcinomas (usually adenocarcinomas) meaning that they originate from the single layer of epithelial cells which line the endometrium and form the endometrial glands. most women with endometrial cancer have a history of unopposed and increased levels of estrogen , one of estrogen normal functions is to stimulate the buildup of the endometrial lining of the uterus . Excess estrogen activity especially in the setting of insufficient progesterone, may

produce endometrial hyperplasia, which can be a precursor for cancer. Increased risk of developing endometrial cancer has been noted in women with increased levels of natural estrogen, women who have a history of endometrial polyps or other benign growths of the uterine lining, postmenopausal women who use estrogen – replacement therapy (specifically if not given in conjunction with periodic progestin) and those with diabetes are also at increased risk.^(15,16) Tamoxifen, a drug used to treat breast cancer, can also increase the risks of developing endometrial cancer. The same risk factors predisposes women to endometrial hyperplasia, which is a precursor lesion for endometrial carcinoma.^(17,18) Numerous recent investigations^(20,21,22) indicate that transvaginal sonography (TVS) is an effective procedure to exclude endometrial and intrauterine abnormalities and advocate its use as a routine first step procedure in patients with abnormal uterine bleeding. The prevalence of endometrium carcinoma is higher in women in whom the endometrium is thicker than 5mm. TVS can, therefore, be used to determine which patients should undergo further investigation.

The combination of TVS and transvaginal hysterosonography (TVHS) is appropriate, with regards to detecting and excluding endoluminal masses as the cause of postmenopausal bleeding.⁽¹⁹⁾ We believe that the combination of TVS and TVHS should be considered as the initial examination in the evaluation of all women with postmenopausal bleeding.

Conclusions

Diagnostic curettage is mandatory without delay in all cases of pre and post menopausal bleeding to rule out malignancy. D&C is important in all cases of recurrent or severe abnormal bleeding to perform a repeated curettage.

When comprised our study with another studies we concludes the combinations of trans vaginal sonography and trans vaginal hystero sonography is both sensitive and specific with regard to detecting and excluding endoluminal masses as the cause of postmenopausal bleeding.

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