

RESULTS

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This work comprises 65 patients who were, almost all, out patients in Zagazig University Hospital . The results obtained will be tabulated according to the following scheme:

A. The clinical statistical results:

1. Age distribution of the patients.
2. The length of the postmenopausal period.
3. Age of menopause.
4. The relation between age of menopause & age of menarche.
5. The parity.
6. The clinical presentation of the patients.
7. The menopausal symptoms.
 - . The percentage of each symptom .
 - . The menopausal symptoms in relation to age.
 - . The menopausal symptoms in relation to the length of the postmenopausal period.

B. The vaginal smears:

- I. Classification of the smears.
- II. Vaginal smears of patients complaining of postmenopausal symptoms:

1. Maturation index in relation to age.
2. Maturation value.
3. Maturation value in relation to age.
4. K.I. in relation to age.
5. Parabasal cell index in relation to hot flushes.

III. K.I. in cases of prolapse & vaginal bleeding.

IV. Inflammatory smears.

V. Dysplastic smears.

A. The clinical data

1. Age:

All patients were postmenopausal for at least one year & all were forty five years or more.

Table (1) shows the age distribution among 65 patients. The mean age of our patients is 53.9 years (± 6.9).

Table (1)

Age in years	No of patients	Percentage of patients
45 - 49	22	33.8
50 - 54	19	29.5
55 - 59	11	16.9
60 - 64	10	15.3
65 & over	3	4.6

2. The post menopausal period: (The period of amenorrhea)

Table (2) shows the distribution of patients according to the length of period of amenorrhea.

Table (2)

Amenorrhea (years)	No of patients	Percentage of patients
1 - 2	22	33.8
3 - 4	12	18.4
5 - 9	13	20.0
10 - 19	16	24.6
20 & more	2	3.1

Table (2) shows that 33.8% of patients attend early in the menopause for gynaecologic consultation.

3. Age of menopause:

The mean age of menopause in whole series is 46.2 years (± 2.8). The age of menopause ranges from 40 to 55 years. The median age of menopause is 45 years.

4. The relation between age of menarche & age of menopause:

Table (3) shows that there is no relation between age of menarche & age of menopause.

Table (3)

Age of menarche	No of patients	Mean age of menopause. (\pm standard deviation)
11 years	12	47.3 years (\pm 2.6)
12 years	10	47.6 years (\pm 3.3)
13 years	13	45.1 years (\pm 2.3)
14 years	10	45.0 years (\pm 3.7)
15 years	10	47.6 years (\pm 3.9)
16 years	6	46.0 years (\pm 2.8)
17 years	4	45.2 years (\pm 1.1)

5. The parity:

All patients were multipare & their parity ranged from 3-11.

6. The clinical presentation of these patients is shown in table (4).

Table (4)

	No of patients	Percentage of patients
A. Menopausal symptoms.	38	58.5%
B. Genital prolapse.	10	15.4%
C. Vaginal discharge.	10	15.4%
D. Vaginal bleeding.	7	10.8%

7. Menopausal symptoms:

Menopausal symptoms were experienced by 58.5% of all patients.

* The various types of menopausal symptoms & the percentage of patients who experienced them are shown in table (5).

Table (5)

Type of menopausal symptoms	Percentage of patients
Hot flushes	57.9%
Sweating	31.6%
Irritability & nervousness	28.9%
Palpitation	26.3%
Insomnia	23.7%
Flatulent dyspepsia	23.7%
Headache	13.2%
Backache	10.5%

* The menopausal symptoms in relation to age:

Table (6) shows the percentage of patients who experienced menopausal symptoms among the various age groups. It shows that there is a gradual decrease in percentage of patients experiencing menopausal symptoms with age.

Table (6)

Age in years	Percentage of patients with menopausal symptoms
45 - 49	81.8%
50 - 54	73.6%
55 - 59	27.3%
60 - 64	20.0%
65 or over	33.3%

* The menopausal symptoms in relation to the length of period of amenorrhea:

Table (7) shows the percentage of patients who experienced menopausal symptoms when the various lengths of period of amenorrhea are compared. It shows that the percentage of patients who experience menopausal symptoms decrease with time.

Table (7)

Amenorrhea (years)	Percentage of patients with menopausal symptoms
1 - 2	72.7%
3 - 4	66.7%
5 - 9	61.5%
10 - 19	37.5%
20 or more	-

B. The vaginal smear

I. Classification of the smears:

The smears are classified according to Papanicolaou's classification. Four smears were inadequate for diagnosis because the cells were insufficient in quantity (3 smears) and in quality (1 smear) to permit predeictive diagnosis. This can be explained by the few number of vaginal cells that can be scraped from the dry postmenopausal vaginal epithelium.

Table (8) shows the number & the percentage of smears of each class in the different groups.

Table (8)

Class	Total No(61 patients)	%	Menop.Symp (36 patients)		Prolapse (9 patients)		Vag.dis-charge(9 patients)		Vag.bleeding (7 patients)	
			No	%	No	%	No	%	No	%
I	34	55.7	25	69.4	4	44.4	-	-	5	71.4
II	13	21.3	3	8.3	3	33.3	6	66.6	1	14.3
III	14	23.0	8	22.3	2	22.3	3	33.3	1	14.3
IV	-	-	-	-	-	-	-	-	-	-
V	-	-	-	-	-	-	-	-	-	-

II. Vaginal smears of patients complaining of postmenopausal symptoms:

1. Maturation index:

Table (9) shows the relation between age & the mean maturation index.

Table (9)

Age in years	No of patients (33 patients)	Mean of maturation index (+ Standard Deviation)			
45 - 49	16	1.4 \pm 1.4	79.8 \pm 27.4	18.8 \pm 28.2	
50 - 54	12	2.3 \pm 1.7	82.5 \pm 26.5	15.2 \pm 30.8	
55 - 59	3	7.7 \pm 4	80.3 \pm 9.5	12 \pm 13.3	
60 - 64	2	17.5 \pm 3.5	75.5 \pm 2.5	6 \pm 5.6	

2. Maturation value: or Oestrogenic value.

Maturation value of each smear was calculated.

Mainly there is 3 levels of maturation value:

- 1) Absent or very low oestrogenic value (0 to 49).
- 2) Moderate oestrogenic value (50 to 64).
- 3) High oestrogenic value (over 65).

Table (10) shows the number & the percentage of each level.

Table (10)

Oestrogenic value	No of patients	Percentage
Absent or very low	10	30.3
Moderate	18	54.5
High	5	15.2

3. Maturation value in relation to age:

Table (11) shows the number & the percentage of each level in different age groups:

Table (11)

Age in years	Total No	Absent or very low		Moderate		High	
		No	%	No	%	No	%
45 - 49	16	2	12.5	11	68.7	3	18.8
50 - 54	12	4	33.3	6	50.0	2	16.7
55 - 59	3	2	66.7	1	33.3	-	-
60 - 64	2	2	100	-	-	-	-

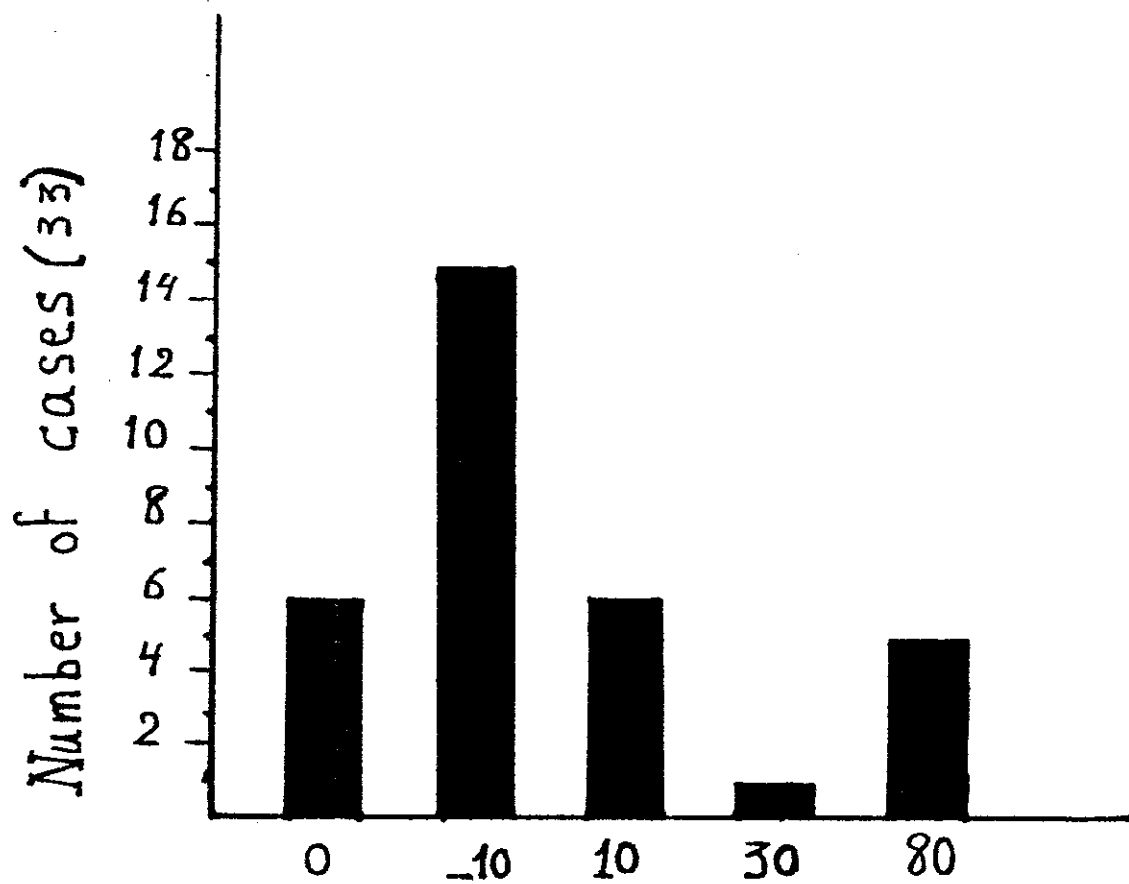
This table shows gradual decrease in oestrogenic value with progress of age.

4. K.I. in relation to age:

Table (12) shows the K.I. at different age groups. The mean K.I. is found to be 16.1 (\pm 28.9).

Table (12)

Age in years	No of cases	1 - 2		3 - 4		5 - 10		10	
		No	%	No	%	No	%	No	%
45-49	16	4	25.0	3	18.7	4	25.0	3	18.7
50-54	12	4	33.3	1	8.3	1	8.3	2	16.6
55-59	3	1	33.3	1	33.3	-	-	1	33.3
60-64	2	1	50.0	-	-	1	50.0	-	-
Total	33	10	30.3	5	15.2	6	18.2	6	18.2



Percent Superficial Cells.

5. The relation between parabasal cell index & hot flushes:

The parabasal cell index was found to be less than 5 in 23 smears & 5 or more in 10 smears. Atrophic smear is defined as that with parabasal cell index 5% or more. (Gordon, 1975).

Table (13) shows the incidence of hot flushes & other menopausal symptoms in the group showing atrophic smears & the other group showing non atrophic smears.

Table (13)

Menopausal symptoms	Atrophic smears		Non atrophic smears	
	10 smears		23 smears	
Hot flushes	5	50%	13	56.5%
Other symptoms	5	50%	10	43.5%

III. K.I. in patients presenting with genital prolapse & vaginal bleeding.

Table (14) shows the values of K.I. in each group.

Table (14)

	No of cases			
	0 - 10	11 - 20	21 - 60	
Prolapse	6	4	1	1
Vaginal bleeding	6	2	2	2

IV. Inflammatory smears:

Inflammatory smears accounts for 21.3% (13 smears) six patients were complaining of vaginal discharge, 3 patients presented with genital prolapse, 3 patients were suffering from menopausal symptoms & one patient were complaining of vaginal bleeding (Table 8). Candida spores were detected in 4 smears & Trichomonas vaginalis in 2 smears.

Table 15 shows the incidence of each type of infection.

Table (15)

Type of infection	No of cases	Percentage
Non specific	7	53.8
Monilial	4	30.8
Trichomonal	2	15.4

V. Dysplastic smears:

Dysplasia was found in 14 smears (23%). Table (8) shows that, 8 patients were complaining of menopausal symptoms, 3 patients were suffering from vaginal discharge, 2 patients presented with genital

prolapse & one patient was complaining of vaginal bleeding.

Mild dysplasia was detected in 9 smears (64.3% of the dysplastic smears).

Moderate dysplasia was detected in 4 smears (28.6% of the dysplastic smears).

Severe dysplasia was detected in one smear (7.1% of the dysplastic smears).

Evidence of inflammation was detected in 4 dysplastic smears (28.6% of the dysplastic smears). Candida spores were present in one smear & trichomonas vaginalis was present in another smear.

Fig. (1) : clusters of intermediate precornified
cells in early menopause. (45 x 6)

Fig. (2): Clear back ground. Cells are in small
clumps, mostly of intermediate cell
group. Few precornified & superficial
cells.
Mild dysplasia (20 x 6).

Fig. (3): Fig. (2) (45 x 6)

Fig. (4): Intermediate & parabasal cells in late
menopause.
Mild dysplasia (20 x 6).

Fig. (5): Fig. (4) (45 x 6).

Fig. (6): - Parabasal & intermediate cells.
- Excessive mucous.
- Leucocytes ++.
(45 x 6).

Fig.(7):- Excessive leucocytosis.
- Intermediate cells, some of them are rounded nearer to the parabasal cell group.
- Cytohormonal assessment is unreliable.
- Mild to moderate dysplasia.
(45 x 6).

Fig. (8):- High Karyopyknotic Index.
- Perinuclear halo. Cytolysis.
- Mild to moderate dysplasia.
(45 x 6).

Fig. (9):-Superficial cells & intermediate cells.
- Erythrocytes ++.
(20 x 6).

Fig. (10):-Clusters of endocervical cells (end on).
- Parabasal cells & intermediate cells.
- Mild dysplasia.
(45 x 6).

Fig. (11): - Scanty dry smear in case of prolapse.
- Anucleated superficial cells.
(20 x 6).