RESULTS

#### RESULTS

Out of 300 women from Kafr El-Sheikh area infested with urinary and/or intestinal schistosomiasis. Only 8 cases had lower genital tract schistosomiasis i.e. 2.66%.

Urine and stool analysis: The type of bilhariza infestation in the 300 women in our study is shown in table 1

Table 1: Urine and stool analysis (300 females).

Infestation	No.of	Percent
Schistosoma haematobium (+ve urine)	232	77.33
Schistosoma mansoni (+ ve stool)	42	14.00
Schistosomoa haematobium and mansoni (+ve urine and stool)	26	8.67
Total	300	100.00

# Analysis of clinical data in the 300 women with urinary and/or intestinal schistosomiasis:

Age is shown in Table 2 .

Table 2: Age (300 women).

Age / years	No.of cases	Percent
> 20	33	11.00
20 - 30	148	49.33
31 - 40	81	27.00
40 +	38	12.67
Total	300	100%

Parity: This shows in Table 3.

Table 3: Parity (300 women).

Parity	No.of cases	Percent
Nullipara	20	6.66
Para 1-4	191	63.67
Para 5+	89	29.67
Total	300	100 %

Gynaecological symptoms: This is shown in Table 4.

Table 4: Gynaecological symptoms (300 women), for which women came to gynaecological out patient clinics.

Symptoms	No.of cases	Percent
1. Leuchorrhoea	90	30.00
2. Pruritis vulvae	50	16.66
3. Pain:		
a. Dysmenorrhoea	72	24.00
b. Lower abdominal	51	17.00
c. Backache	45	15.00
d. Dysparunia	173	57.66
e. Dysuria	109	36.33
4. Infertility	97	32.33
a. Primary	69	23.00
b. Secondary	28	9.33
5. Contact bleeding	10	3.33
6. Irregular bleeding	50	16.66

<sup>\*</sup> Some patients presented with more than one symptom.

This table shows that leuchorrhoea, dysparunia, dysuria and infertility were the commonest complains.

# Gynaecological examination:

#### Vulva :

In 13 women among the 300 women studied, there were vulval lesions as shown in (Table 5).

Table 5. Vulval lesions (300 women).

Clinical findings	No.of cases	Percent	
Cauliflower mass	3	1.00	
Polyp	6	2.00	
Ulcer	2 ·	0.66	
Dermoid cyst	1	0.33	
Leukoplakia	1	0.33	
Total	13	4.33	

biopsy taken from these 13 women with vulval lesions revealed two cases of vulval schistosomiasis. One was in the form of a polyp, grey in colour with rought surface, measuring 0.5 x 2.5 cm., with a pedicle and the surface was not ulcerated. Another case was in the form of a cauliflower, red mass, measuirng 3 x 4.5 cm.

#### Vagina:

In 8 women among the 300 women studied, vaginal lesions were found in (Table 6).

Table 6. Vaginal lesions (300 women).

Clinical findings	No.of cases	Percent
Polyp	4	1.34
Ulcer	1	0.33
Fistula	2	0.66
Narrowing of vagina	1	0.33
Total	8	2.66

Among biopsies taken from the lesions in these 8 women, bilharziaiasis was detected in one case. The lesion was in the form of a polyp, measuring 3 x 5 cm., pinkish in colour, friable and attached to the anterior vaginal wall. Another case shows bilharzialiasis in a vaginal smear (it may be from the cervix as we taken smear from posterior formix and ectocervix). Non-bilharzial polyp were 1 fibroma, 1 papilloma, 1 cyst.

## Cervix:

In 119 women, out of 300 studied women, cervical lesions were seen (table 7).

Table 7. Cervical lesions (300 women).

Carvical findings	No.of cases	Percent
Cervical erosion	85	71.44
Chronic cervicitis	20	16.80
Cervical polyp	14	11.76
Total	119	100.00

This table shows that there were 14 cases with cervical polyps. Histopathological study of lesions from these cases revealed 4 cases of schistosoma. Three cases were ectocervical and one case was endocervical. Non bilharzial polypi include: 5 adenomatous polypi, 3 fibromyomata, and 2 papillomata.

# Uterus and adnexa:

Clinical examination of the uterus and adnexae is shown in table 8.

Table 8. Uterine and adnexal findings (300 women).

Uterine and adnexal findings	No.of cases	Percent
Position of the uterus		
(a) anteverted	214	71.33
(b) Retroverted	86	28.67
Uterine prolapse	4	3.33
Enlarged uterus	113	44.33
Thickened and enlarged tubes	12	4.00
Thickened and enlarged ovaries	10	3.33

Table (9): Sites of schistosomal lesions found in the lower genital tract in the 300 women examined.

Table 9: Sites of schistosomal lesions.

Organ involved	No.of cases	Percent
Vulva	2	0.66
Vagina	2	0.66
Cervix	4	1.34
Total	8	2.66

The incidence of schistosomal lesions found among 300 women infected with urinary and/or intestinal schistosomiasis were 8 cases (2.66%). Both vulva and vagina were affected in (0.66% of the total cases), and the cervix was affected in 1.34% of all cases, the cervix was the commonest site involved.

# Analysis of cases with schistosomal gynaecological lesions (8 women):

#### (a) Distribution:

Out of 300 women with schistosomiasis 8 cases revealed positive schistosomal lesions, by histopathology. All lesions were in the lower genital organs, i.e. vulva, vagina and cervix (2.66%). The distribution of the positive cases is presented in table 10.

Table 10. Distribution of schistosomal lesions in the lower genital tract (8 cases).

Organ involved	No.of.case	s Percent
Vulva	2	25
Vagina	2	25
Cervix	4	50
Total	8	100

# (b) Age distribution:

Table (11) shows the age distribution in the 8 cases with schistosomal gynaecological lesions.

Table 11. Age distribution (8 cases).

A mò	No. of cases			
Age (years)	Vulva	Vagina	Cervix	Total
Less than 15	-	-	-	
15 - 20	ı	· 1	<b>-</b>	2
21 - 25	1		-	1
26 - 30		-		-
31 - 35	-	1	-	1
35 +	-	-	4	4
Total	2	2	4	8

Three cases were 30 years old or less (37.5%), while 5 cases (62.5%) were above the age of 30 years.

Parity: Table 12 shows parity gynaecological schistosomal cases.

Table 12. Parity in gynaecological schistosomal cases.

D	No. of cases			
Parity	Vul <b>v</b> a	Vagina	Cervix	Total
Nullipara	1	-	-	1
Para I	-	1	-	1
Para II	1	-	1	2
Para III	**	1	-	1
Para IV or more	-	-	3	3
Total	2	2	4	8

From the above table, it was found that para IV or more was found in three cases (37.5%) and para II represented by two cases (25%) . Nullipara, para I and para III each represented by one case (12.5%).

Table 13. Shows the pathological findings in the schistosomal gynaecological cases.

Table 13. Pathological findings in the schistosomal gynaecological cases.

Pathological Finding	No. of cases			
	Vul <b>v</b> a	Vagina	Cervix	Total
Mass :	2	1	3	6
Cauliflower	1	-	-	1
Polyp	1	1	3	5
Endocervical polyp			1	1
Total	2	1	4	7

From the above table, it was found that the commonest bilharzial lesion was in the form of a polyp, which was found in 6 cases (75%). A cauliflower mass was seen in one case (12.5%), while in smother case bilharziasis was detected in the vaginal smear.

# Histopathologic study of positive bilharzial cases:

Eight out of 300 females, infested with urinary and/or intestinal bilharziasis were positive for lower genital tract bilharziasis. Four lesions were found in the cervix, out of which three cases were in the ectocervix and one was endocervical. Two lesions were detected in both the vagina and the vulva.

#### (a) Cervical cases:

# Case I: (Figure 1):

Pathological examination of the specimen reveals bilharzia ova, both living and dead, in the connective tissue beneath the stratified squamous epithelium and among the cervical glands. The ova are diffusely surrounded with plasma cells, eosinophils, lymphocytes and histocytes. In certain places, the ova can be seen in the rete pegs. The covering squamous epithelium shows hyperplastic and mild atypical areas, but there is no malignancy.

# Case 2: (Figure 2):

The polyp is covered by squamous epithelium, showing marked keratinisation, acanthosis and parakeratosis. Underneath the epithelium, there are many schistosoma ova, some are dead and other are living or calcified. The ova are surrounded with eosinophils, lymphocytes, plasma cells and histocytes, with marked vascularity around them, there is no evidence of malignancy.

# Case 3: (Figures 3 & 4);

Endocervical polyp covered by columnar epithelium, showing hyperplastic changes. Dead, living and calcified ova are found in the connective tissue layer beneath the columnar epithelium and among the cervical glands. The ova are surrounded by cellular reaction, i.e. plasma cells, lymphocytes, histocytes, eosinophils cells and giant cells. Mild atypical changes are detected in the covering columnar epithelium.

# Case 4: (Figure 5):

A section from a polypoid mass in the posterior aspect of the cervix stained by Haematoxylin and eosin. It shows a fibromyomatous lesion, composed of fusiform muscle cells with long rod shaped nuclei, alternating with fibroblasts. Bilharzia ova, dead or living, are seen in thesection. They are surrounded by cellular aggregation, i.e. histocytes, eosinophils, lymphocytes and plasma cells.

# (b) Vaginal lesions:

# Case 5 (Figure 6):

Section of the vaginal polyp shows many bilharzia ova, living dead or calcified, found in the subepithelial connective tissue and surrounded by specific bilharzial reaction, mostly in the form of lymphocytes, eosinophils and planma cells. The cells are scattered in the section. The covering shows startified squamous epithelium with hyperkeratosis and no malignancy.

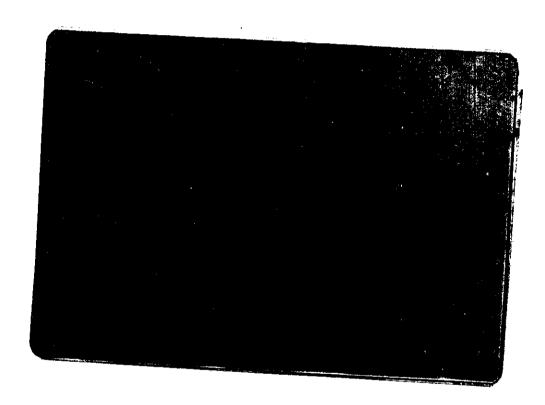


Figure (10): Mild atypical changes in the endocervical cells of smear taken from case No.3. (papanicoloau stain x 280).

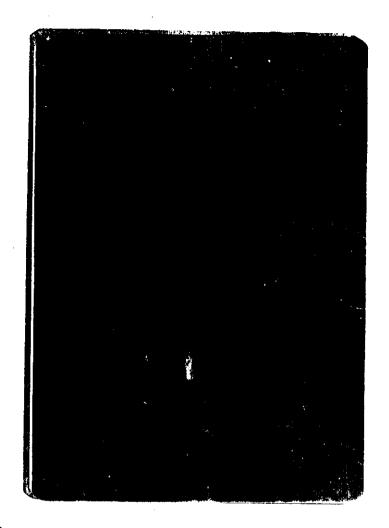


Figure (9): Smear from posterior vaginal fornix showing ovum of schistosoma haematobium among the superifical keratinised cells. (papanicoloau stain x 280).

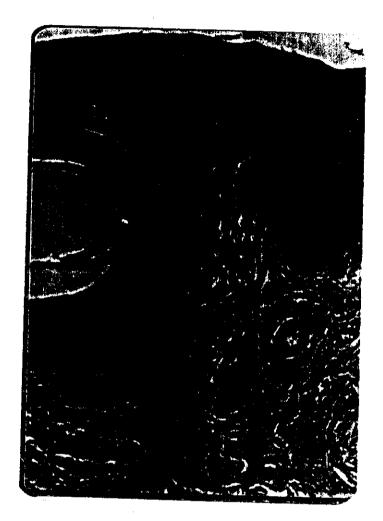


Figure (8): Bilharzial lesion in the vulval stroma surrounding the uretheral opening.

(HX. & Eos. x 100).



Figure (7): Vulval bilharzial lesion showing many bilharzial ova among the keratinized squamous epithelium.

(HX. & Eos. x 100).

#### (c) Vulval lesions:

#### Case 6: (Figure 7):

The specimen consists of a polypoid structure covered by stratified squamous epithelium, which is hyperplastic in some areas. The sweat and sebaceous glands can be seen. The connective tissue core is heavily infiltrated with bilharzia ova and surrounded with usual cellular reaction, in addition to foreign body giant cells. There is no malignancy.

# Case 7: (Figure 8):

Pathological examination of the specimen reveals numerous bilharzia ova, both living and dead, in the subepithelial connective tissue layer. They are surrounded by cellular aggregations in the form of plasma cells, eosinophils, histocytes and lymphocytes. The covering epithelial is transitional that shows no malignancy.



Figure (6): Bilharzial vaginitis composed of bilharzial ovum in the stroma, surrounded by specific granulation tissue.

(HX. & Los. x 100).



Figure (5): Fibromyomatous cervical polyp with bilharzial reaction among the tissue.

(HX. & Eos. x 100).

### Case 4: (Figure 5):

A section from a polypoid mass in the posterior aspect of the cervix stained by Haematoxylin and eosin. It shows a fibromyomatous lesion, composed of fusiform muscle cells with long rod shaped nuclei, alternating with fibroblasts. bilharzia ova, dead or living, are seen in thesection. They are surrounded by cellular aggregation, i.e. histocytes, eosinophils, lymphocytes and plasma cells.

# (b) Vaginal lesions:

#### Case 5 (Figure 6):

Section of the vaginal polyp shows many bilharzia ova, living dead or calcified, found in the subepithelial connective tissue and surrounded by specific bilharzial reaction, mostly in the form of lymphocytes, eosinophils and plasma cells. The cells are scattered in the section. The covering shows startified squamous epithelium with hyperkeratosis and no malignancy.

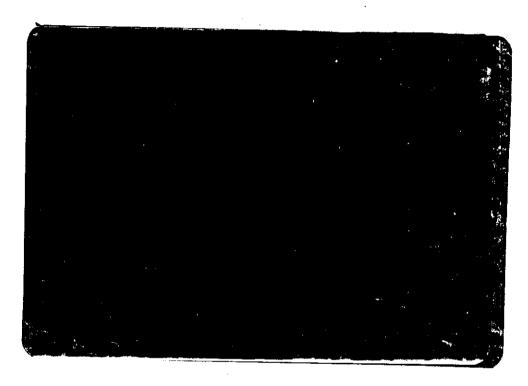


Figure (4): Specific bilharzial granulation tissue in the endocervical stroma composed of bilharzial ova surrounded by plasma cells, eosinophils, lymphocytes giant cells and histocytes.

(HX. & Eog. X 180)



Figure (3): Bilharzial endocervicitis showing

Bilharzial ova among the endocervical glands .

(HX. & Eos. X 120).



Figure (2): bilharzial ectocervicitis illustrating many bilharzia ova in the stroma and acanthotic covering epithelium.

(HX. & Eos.x120).