I- Histol gical Picture :-

1- Non Bilharzial group :-

**** Urinary Bladder:***

After Haematoxylin and eosin staining, sections of each of the specimens from the control subjects showed normal histology as regards the epithelium and lamina propria. No inflammatory changes or vascular abnormalities were detected. (Fig. 1).

**** Ureter:***

After Haematoxylin and eosin staining, sections of each of the specimens from the control subjects showed normal histology as regards the epithelium and lamina propria. No inflammatory changes or vascular abnormalities were seen. (Fig. 2).

2- Bilharzial group:

**** Urinary Bladder :-***

After haematoxylin and eosin staining, sections showed epithelium with hyperplastic changes, the lamina propria showed congestion, oedema and chronic inflammatory cells, with massive deposits of bilharzial ova in Lamina propria. (Fig. 3).

**** Ureter :-***

After haematoxylin and eosin staining, sections showed hyperplastic changes, the lamina propria showedchronic inflammatory cells with deposits of bilharzial ova. (Fig. 4).

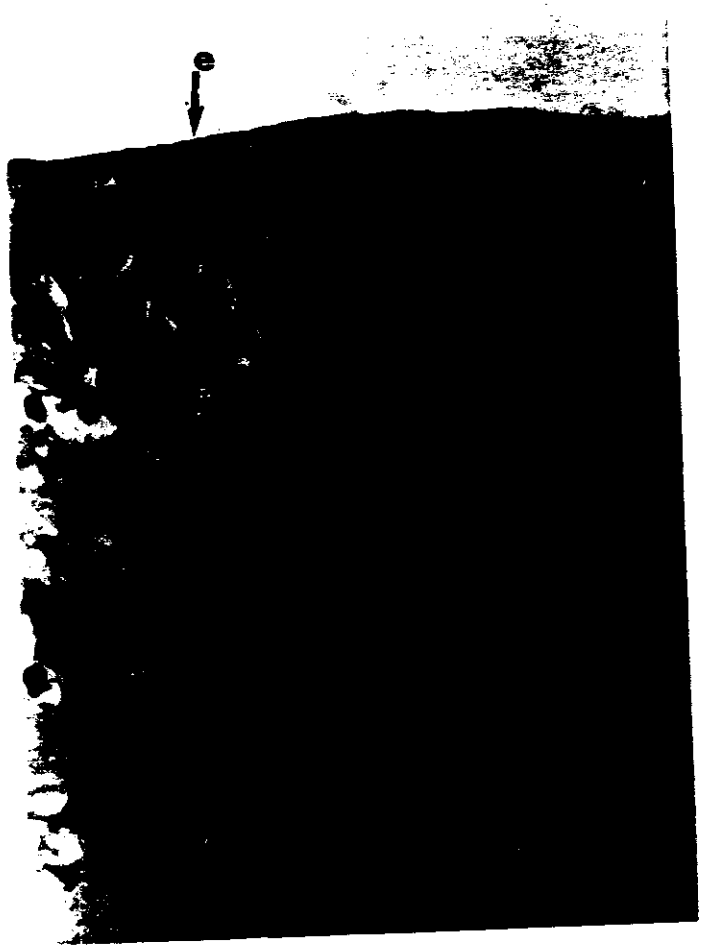


Fig. (1): A photomicrograph of a section in the urinary bladder of a non bilharzial man aged 50 years, showing epithelium (E) and lamina propria (L). (Haematoxylin and Eosin, Proj. 10, Obj.40).

Fig. (2): A photomicrograph of a section in the ureter of a non bilharzial man aged 40 years, showing epithelium (E) and lamina propria (L). (Haematoxylin and Eosin, Proj. 10, Obj. 10).

Fig. (3): A photomicrograph of a section in the urinary baldder of a bilharzial man aged 45 years, showing epithelium (E) and lamina propria (L). showed inflammatory cells, increase of blood vessels (V), and deposits of bilharzial Ova (O). (Haematoxylin and Eosin. Proj, 10, Obj. 20).

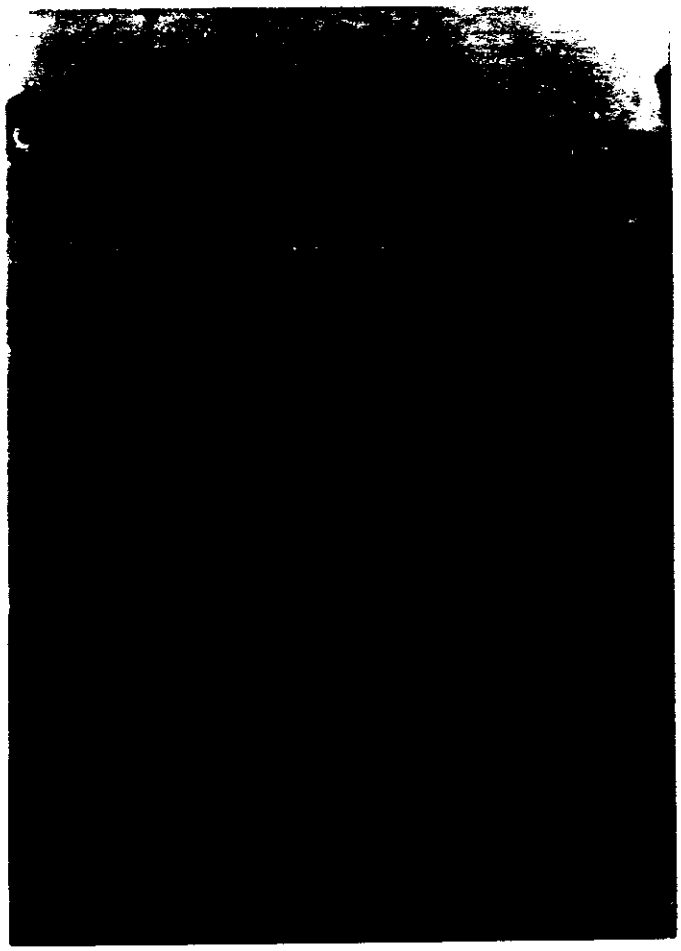


Fig. (4): A photomicrograph of a section in the urter of a bilharzial man aged 40 years, showing hyperplasia in epithelium (e), the lamina propria (l), showed inflammatory cells and increase of blood vessels (v) with deposits of bilharzial ova (O) arrows. (Haematoxylin and Eosin, Proj. 10, Obj.40).

II. Immunohistological Picture :-

T Lymphocytes:

A- Pan T lymphocytes (T_3):

- Positive control:

Sections in the tonsil used as positive controls showed (+) ve staining of the majority of cells in the interfollicular area and few positive cells in the follicles. (Fig. 5,6).

- Urinary Bladder :-

** Non bilharzial group :*

Cells reacting with antilymphocyte monoclonal antibodies for T_3 were demonstrated within epithelium and lamina propria (Fig. 7,8). Positive cells ranged from 20.7 to 38.3 cells/H.P.F.with a mean of 33.94 ± 4. (Table 1).

** Bilharzial group :*

The biopsies examined showed infiltration with T Lymphocytes throughout the epithelium however, they tended to be concentrated in the lamina propria (Fig. 9).

The number of T3 (+)ve cells ranged from 70.4 to 156.9 with a mean of 105.89 ± 25.75. However, sections used as negative controls in which the primary antibody was omitted and treated only with T BS, while other steps are kept the same. showed no reaction in all parts. (Fig. 10). Table 2.

Fig. (5): A photomicrograph of a cryostat section in a normal human tonsil stained for pan T lymphocytes with anti-T_3 Mc. Ab. showing positively stained cells mainly in the interfollicular area, (arrows) (Immunoperoxidase stain, Proj, 10, Obj. 10).

Fig. (6): A photomicrograph of a cryostat section in a normal human tonsil stained for pan T lymphocytes with anti-T_3 Mc. Ab. showing positively stained cells mainly in the interfollicular area, (arrows) (Immunoperoxidase stain, Proj, 10, Obj. 20).

Fig. (7): A photomicrograph of cryostat section in a urinary bladder (U.B.) of a non bilharzial man stained for pan T lymphocytes (T3). Showing positive cells within epith. (e) and lamina propia (l). (Immunoperoxidase stain, Proj. 12.5, Obj. 40).

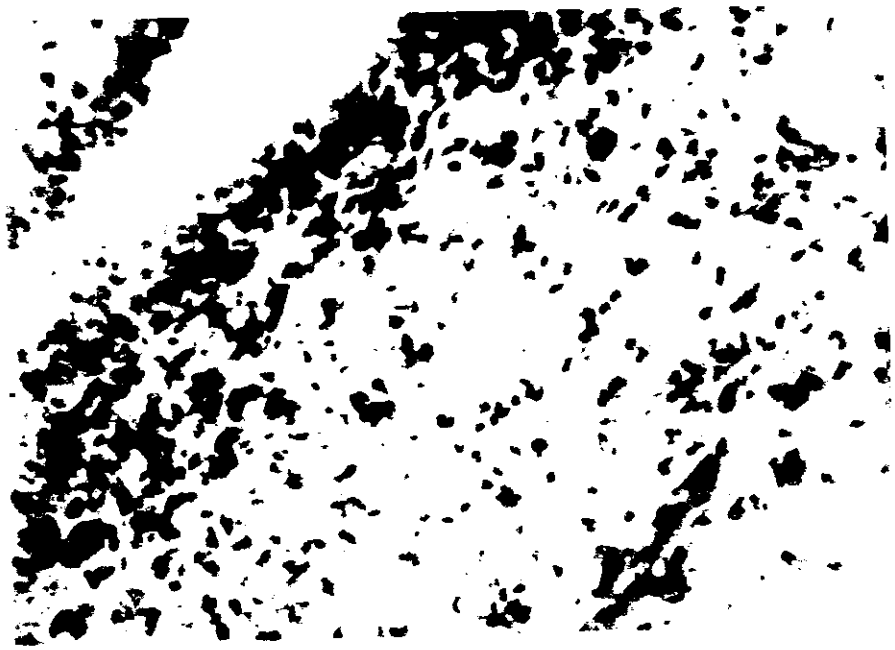


Fig. (8): A photomicrograph of cryostat section in a urinary bladder (U.B.) of a non bilharzial man stained for pan T lymphocytes (T3). Showing positive cells within epith. (e) and lamina propia (l). (Immunoperoxidase stain, Proj. 10, Obj. 40).

Fig. (9): A photomicrograph of a cryostat section in the urinary bladder (U.B.) of a bilharzial patients stained for pan T ymphocytes(T_3). showing positive cells within lamina propia. (Immunoperoxidas stain. Proj. 10, Obj. 40).

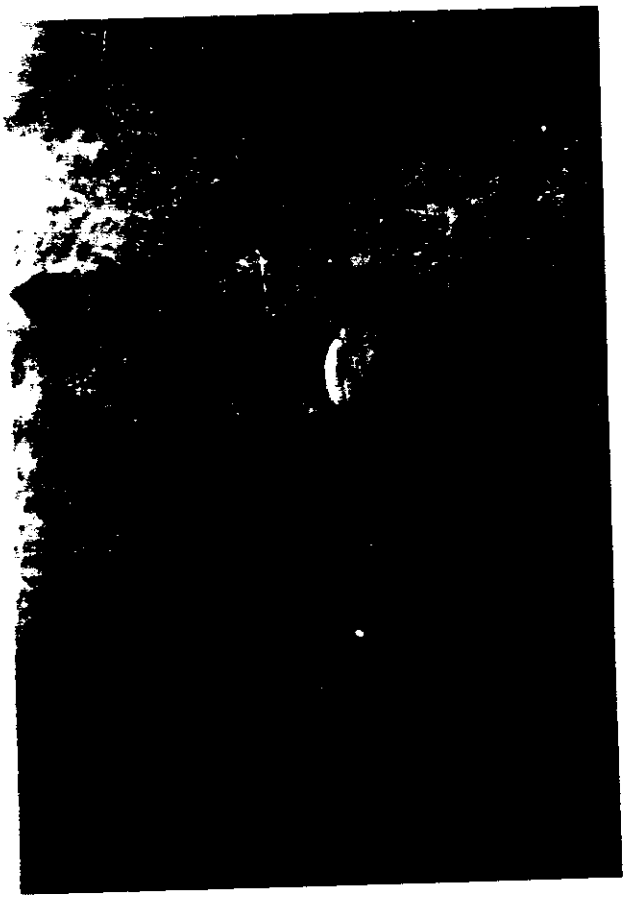


Fig. (10): A photomicrograph of a cryostat section in the U.B. of a bilharzial patients after omitting the primary antibody. Showing no reaction in all parts. (Immunoperoxidase stain, Proj, 10, Obj, 10).

Table 1:

Patient No.	*Reactivity of MAB speific for Pan T(+)ve cells in Non bilharzial U.B.*
1	20.7
2	33.4
3	38.3
4	30.5
5	37.8
Mean	**33.94**
± S.D.	**4**

+++ = High sig ificance.

U.B. = Urinary Bladder

Pan T Lymphocytes (T_3).

MAB = Monoclonal antibody.

Table 2 :

Patient No.	*Reactivity of MAB speific for pan T(+)ve cells in bilharzial U.B.*
1	86.1
2	102.4
3	74.1
4	85.7
5	91.2
6	72.3
7	78.5
8	117.8
9	105.9
10	131.1
11	114.1
12	156.9
13	147.5
14	128.3
15	141.9
16	86.1
17	97.1
18	133.9
19	146.7
20	135.1
21	99.5
22	85.1
23	94.8
24	75.9
25	103.1
26	79.5
27	109.1
28	135.5
29	70.4
30	91.1
Man	**105.89**
± S.D.	**25.75**
t	**6.1603**
D.F.	**33**
P	**< 0.001**
Sig.	**+++**

+++=High significance.
Pan T Lymphocytes (T_3).

U.B.= Urinary Bladder
MAB=Monoclonal antibody.

- *Ureter:*

** Non Bilharzial group:*

The reaction with antilymphocyte monoclonal antibodies using T_3 were demonstrated within epithelium and lamina propria (Fig. 11). Positive cells ranged from 57.8 to 67.2 with a mean of 60.8 ± 3.78, (Table 3).

** Bilharzial group:*

The number of T_3 (+)ve cells ranged between 120.1 and 183.2 with a mean of 154.35 ± 22.08 (Fig. 12), (Table 4).

Sections used as negative controls in which the primary antibody was omitted and treated only with TBS, while other steps are kept the same, showed no reaction in all parts.

B-Helper/Inducer Lymphocytes (T_4):

Positive control :

Sections in the tonsil used as positive controls showed (+)ve staining of the majority of cells in the interfollicular area with only few positive one within the follicles .

Fig. (11): A photomicrograph of a cryostat section in the ureter of a non bilharzial subjects stained for pan T Lymphocytes (T3) showing positive cells within epithelium (e) and lamina propria (l) (arrows). (Immunoperoxidase stain, Proj. 10, Obj. 40) counter stain with Hx.).

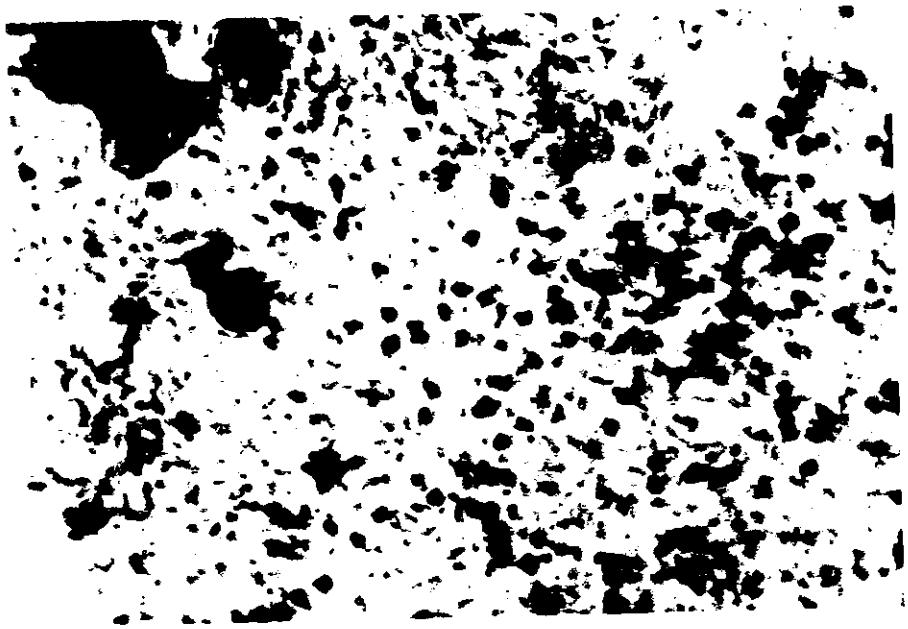


Fig. (12): A photomicrograph of a cryostat section in the ureter of a bilharzial human, stained for pan T Lymphocytes (T3) showing positive cells within lamina propria (l) (arrow) Counter stained with Hx.

(Immunoperoxidase stain, Proj. 10, Obj. 40).

Table 3:

Patient No.	*Reactivity of MAB specific for Pan T(+) ve cells in Non bilharzial ureter*
1	58.3
2	60.8
3	67.2
4	59.9
5	57.8
Mean ± S.D.	**60.8 3.78**

+++ : High significance.

Pan T = Pan T lymphocytes (T_3).

MAB = Monoclonal antibody.

Table 4:

Patient No.	*Reactivity of MAB specific for pan T (+) ve cells in bilharzial uerter*
1	120.1
2	126.3
3	180.8
4	183.2
5	135.3
6	178.4
7	160.1
8	181
9	141.5
10	122.5
11	175.3
12	155.4
13	172.8
14	167.2
15	130.7
16	151.2
17	128.2
18	139.7
19	175.2
20	162
Mean	**154.35**
S.D. ±	**22.08**
t	**9.2945**
D.F.	**23**
P.	**<0.001**
Sig.	**+++**

+++ : High significance.

Pan T = Pan T lymphocytes (T_3).

MAB = Monoclonal antibody.

- *Urinary Bladder :*

** Non Bilharzial group :*

The reacting cells were demonstrated within the epithelium, lamina propria and submucosa Fig. (13,14). Positive cells ranged from 5.5 to 8.7 with a mean of 7.2 ± 1.53 cells/H.P.F. (Table 5).

** Bilharzial group :*

There were infiltration with lymphocytes throughout the epithelium and lamina propria (Fig. 15). The number of T_4 (+)ve cells ranged between 41.2 and 97.9 with a mean of 64.73 ± 18.2. (Table 6).

Negative controls :

Sections used as negative controls in which primary antibody was omitted and treated only with T BS, while other steps are kept the same. Showed no reaction in all parts of the slides.

- Ureter :-

**** Non Bilharzial group :-***

The reaction with antilymphocyte monoclonal antibodies using T_4 was demonstrated within epithelium and lamina propria Fig. (16). Positive cells ranged from 7.3 to 11.3 with a mean of 9.5 ±1.58 (Table 7).

**** Bilharzial group :***

The number of T_4 (+)ve cells ranged between 62.6 and the results are shown in (Fig. 17). 11.2 with a mean of 86.21 ± 16.19. (Table 8).

Fig. (13): A photomicrograph of a cryostat section in the U.B. of a non bilaharzial patients stained for Helper/Inducer Lymphocytes (T_4) showing positive cells within epithelium (e) and lamina propria (l) (arrow) (Immunoperoxidase Proj. 12.5, Obj. 40 counter stained with Hx.).

Fig. (14): A photomicrograph of a cryostat section in the U.B. of a non bilaharzial patients stained for Helper/Inducer Lymphocytes (T_4) showing positive cells within epithelium (e) and lamina propria (l) (arrow) (Immunoperoxidase Proj. 10, Obj. 40 counter stained with Hx.).

Fig. (15): A photomicrograph of a cryostat section in the U.B. of a bilharzial patient for Helper/Inducer Lymphocytes stained with anti-T4 Mc. Ab. showing positive cells within lamina propria (l) and counter stained with haematoxylin. (Immunoporoxidase stain, Proj. 10, Obj. 40).

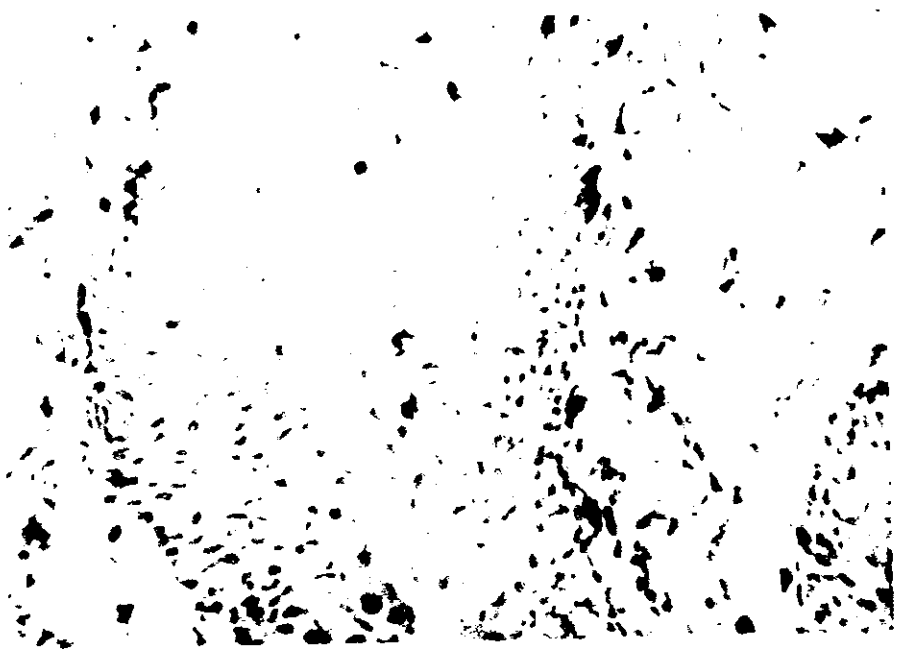


Fig. (16): A photomicrograph of a cryostat section in the ureter of a non bilharzial subjects stained for all Helper/Inducer Lymphocytes with anti. T_4 Mc. Ab. Counter stained with Hx, demonstrating positive stained cells in epithelial layer and lamina propria (Immunoperoxidase stain, Proj. 10, Obj. 20).

Fig. (17): A photomicrograph of acryostat section in the ureter of a bilharzial patients stained for all Helper/Inducer Lymphocytes, ositive stained cells in lamina propria (l) with anti. T4 Mc. Ab., counter stained with Hx. (Immunoperoxidase stain, Proj.10, Obj. 20).

Table 5:

Patient No.	*Reactivity of MAB specific for H/I (+) ve cells in non bilharzial. U.B.*
1	5.6
2	8
3	8.7
4	5.5
5	8.2
Mean ± S.D.	**7.2 1.53**

+++ : High significance .

U.B. = Urinary Bladder

H/I = Helper/Inducer lymphocytes (T_4).

MAB = Monoclonal antibody.

Table 6:

Patient No.	*Reactivity of MAB specific for H/I T (+) ve cells in bilharzial*
1	45.8
2	72.4
3	41.6
4	52.9
5	58.3
6	43.3
7	41.4
8	87.2
9	63.3
10	80.8
11	62.6
12	92.5
13	89.5
14	76.7
15	85.2
16	57.8
17	57.1
18	81.3
19	97.9
20	52.7
21	51.1
22	52.3
23	41.2
24	66.3
25	44
26	65.2
27	95.8
28	44.1
29	57.3
30	84.9
Mean	**64.73**
± S.D.	**18.20**
t	**6.9772**
D.F.	**33**
P.	**< 0.001**
Sig.	**+++**

+++ = High significance.
H/I = Helper/Inducer lymphocytes (T_4).
U.B. = Urinary Bladder
MAB=Monoclonal antibody.

Table 7 :

Patient No.	*Reactivity of MAB specific for H/I cells in non bilharzial uerter .*
1	8.7
2	10.6
3	11.3
4	9.6
5	7.3
Mean	**9.5**
± S.D.	**1.58**

+++ = High significance.

H/I = Helper/Inducer lymphocytes (T_4).

MAB = Monoclonal antibody.

Table 8 :

Patient No.	*Reactivity of MAB specific for H/I cells in bilharzial ureter*
1	63.1
2	62.6
3	97.6
4	91.2
5	73.1
6	110.3
7	100.3
8	111.2
9	83.1
10	63.7
11	102.1
12	82.2
13	104.1
14	95.1
15	67.2
16	76.8
17	78.1
18	71.3
19	101.3
20	89.6
Mean	**86.21**
± S.D.	**16.19**
t	**10.4157**
D.F.	**23**
P.	**< 0.001**
Sig.	**+++**

+++ = High significance.

H/I = Helper/Inducer lymphocytes (T_4).

MAB = Monoclonal antibody.

C- Suppressor/Cytotoxic Lymphocytes (T_8):

Positive controls :

Sections in the tonsil used as positive controls showed few (+)ve cells of the Leu 4 positive population in the interfollicular areas.

- Urinary Bladder :

**** Non Bilharzial group :***

Cells reacting with antilymphocyte monoclonal antibodies using T_8 were demonstrated within epithelium and lamina propria (Fig. 18).

Positive cells ranged from 22.9 to 29.1 with a mean of 25.92 ± 2.71 (Table 9).

**** Bilharzial group :***

Cells infiltrated through the epithelium and the T Lymphocytes were increased in the lamina propria and in between ova (Fig. 19). Positive cells ranged from 24.9 and 62.1 with a mean of 37.67 ± 8.94 (Table 10).

- Ureter :

**** Non Bilharzial group :***

The reaction with antilymphocyte monoclonal antibodies using T8 were demonstrated within epithelium and lamina propria (Fig. 20). Positive cells ranged from 41 to 54 with a mean of 46.58±5.62. (Table 11).

**** Bilharzial group :***

The number of (+)ve cells ranged from 45.4 to 73.1 with a mean of 59.62 ± 8.54. (Fig. 21), (Table 12).

Fig. (18): A photomicrograph of a cryostat section in the U.B. of a non bilharzial man, stained for all suppresor/cytotoxic lymphocytes (T8) with anti-T8 Mc. Ab., and counter stained with Hx. showing positive cells within epithelium (e) and lamina propria (l).

(Immunoperoxidase stain, Proj.125, Obj.40).

Fig. (19): A photomicrograph of a cryostat section in the U.B. of a bilharzial patient stained for all suppressor/cytotoxic lymphocytes (T_8), with anti-T_8 Mc. Ab and Counter stained with Hx. showing positive cells within lamina propria (l) (Immunoperoxidase stain. Proj. 10, Obj. 20).

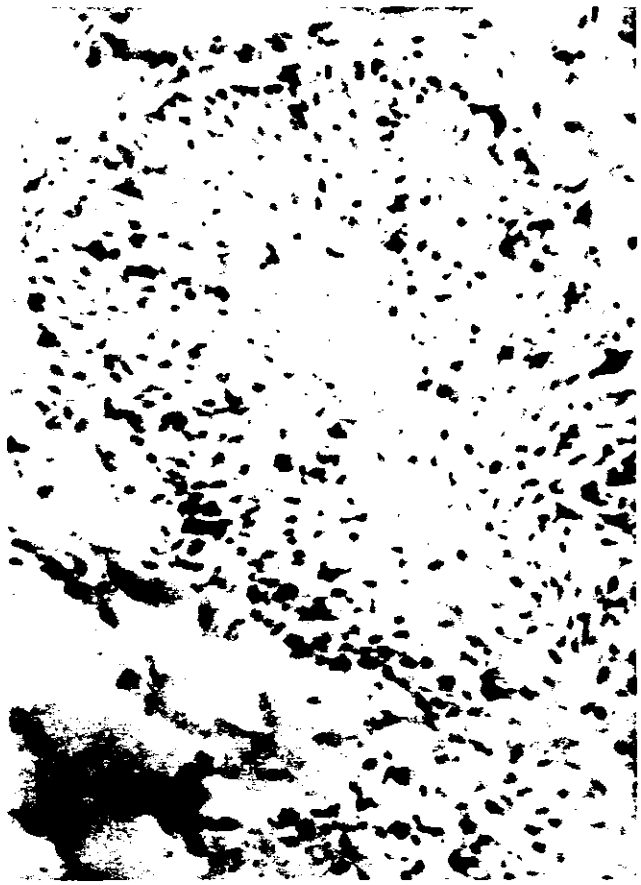


Fig. (20): A photomicrograph of a cryostat section in the ureter of a non-bilharzial man, stained for all suppressor/cytotoxic lymphocytes (T_8) with anti-T_8 Mc. Ab., and counter stained with Hx. demonstrating positively stained cells in epithelial and lamina propria layers (Immunoperoxidase stain, Proj. 10, Obj. 20).

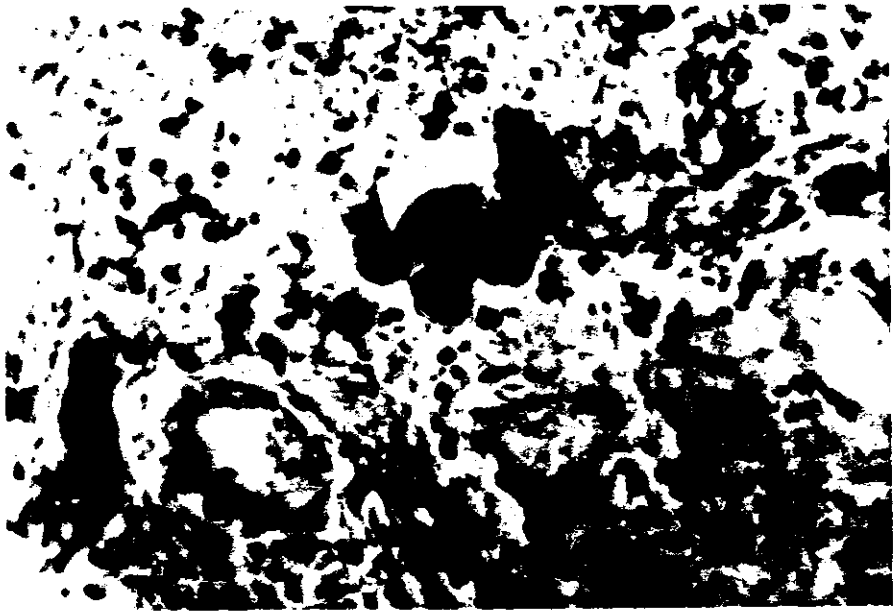


Fig. (21): A photomicrograph of a cryostat section in the ureter of a bilharizal patient stained for all suppressor/cytotoxic lymphocytes (T_8). with anti-T_8 Mc. Ab. and counter stained with Hx. Showing positively stained cells in lamina propria layer. (Immunoperoxidase stain. Proj. 10, Obj. 20).

Table 9:

Patient No.	*Reactivity of MAB specific for S/C (+) ve cells in non bilharzial U.B.*
1	23.3
2	26.8
3	29.1
4	22.9
5	27.5
Mean	**25.92**
± S.D.	**2.71**

+++ = High significance.

U.B. = Urinary Bladder.

S/C = Suppressor/Cytotoxic lymphocytes (T_8).

MAB = Monoclonal antibody.

Table 10 :

Patient No.	*Reactivity of MAB specific for S/CT cells in bilharzial U.B.*
1	37.30
2	28.90
3	32.40
4	31.80
5	31.50
6	28.80
7	33.30
8	27.40
9	33.70
10	43.70
11	45.80
12	62.10
13	51.80
14	49.50
15	51.20
16	25.50
17	38.70
18	48.50
19	43.10
20	43.70
21	35.20
22	27.70
23	39.10
24	55.60
25	33.90
26	43.10
27	36.50
28	24.90
29	33.10
30	37.67
Mean	**8.94**
± S.D	**6.9772**
t	**33**
D.F.	**< 0.01**

+++ = High significance. U.B. = Urinary bladder.
S/C = Suppressor/Cytotoxic Lymphocytes (T_8).
MAB = Monoclonal antibody.

Table 11

Patient No.	*Reactivity of MAB specific for S/C cells in non bilharzial ureter*
1	41.3
2	46.5
3	54
4	50.1
5	41
Mean	**46.58**
± S.D.	**5.62**

+++ = High significance.

S/C = Suppressor/Cytotoxic Lymphocytes (T_8).

MAB = Monoclonal antibody.

Table 12 :

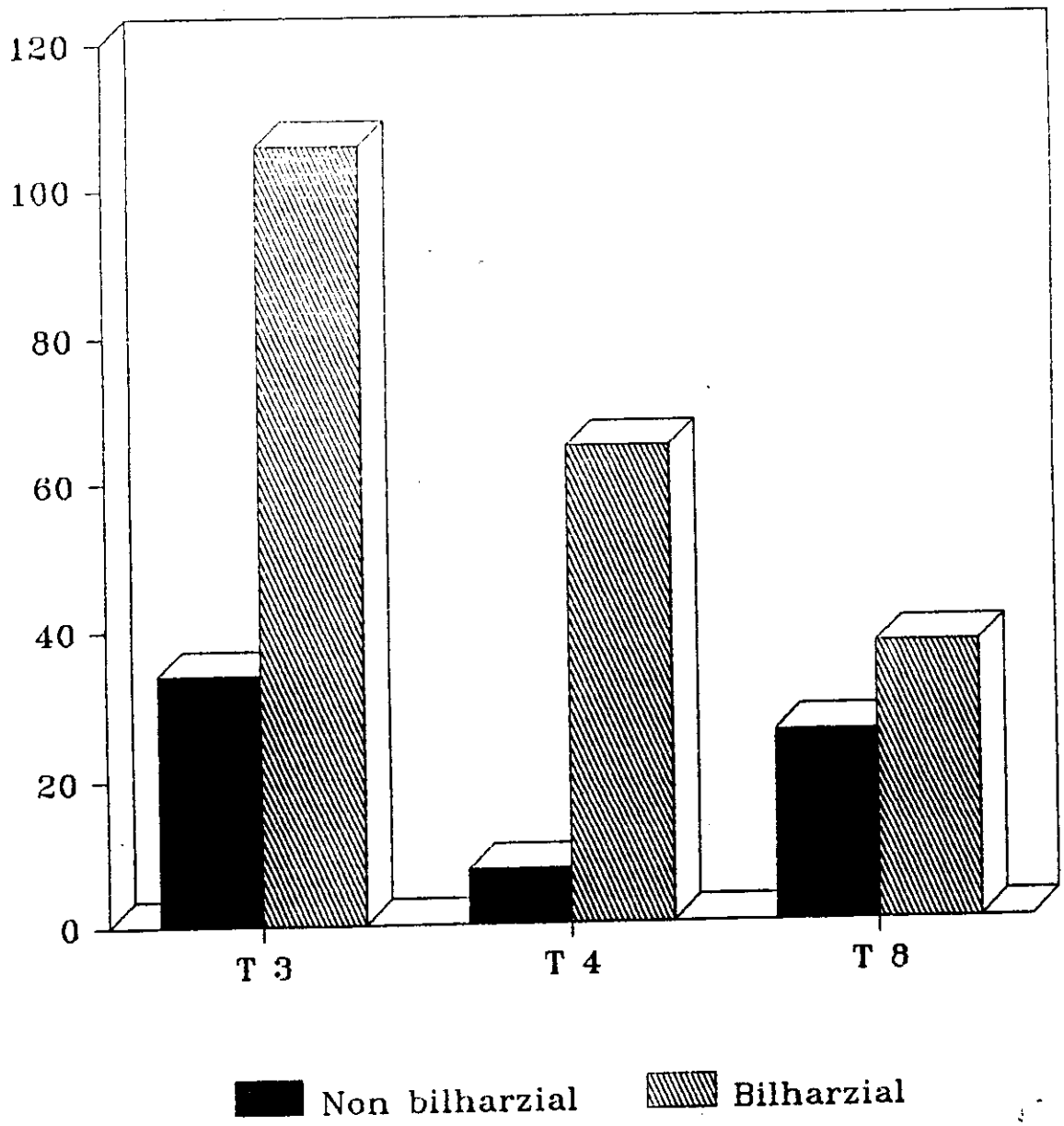
Patient No.	*Reactivity of MAB specific for S/C cell in bilharzial ureter.*
1	48.3
2	53.5
3	68.9
4	73.1
5	50.7
6	63.2
7	56.8
8	59.9
9	50.5
10	46.3
11	71.4
12	67.1
13	58.3
14	62.9
15	55.1
16	67.3
17	45.4
18	61.1
19	68.6
20	63.9
Mean	**59.62**
± S.D.	**8.54**
t	**3.2165**
D.F.	**23**
P.	**< 0.01**
Sig.	+

+++ = High significance.

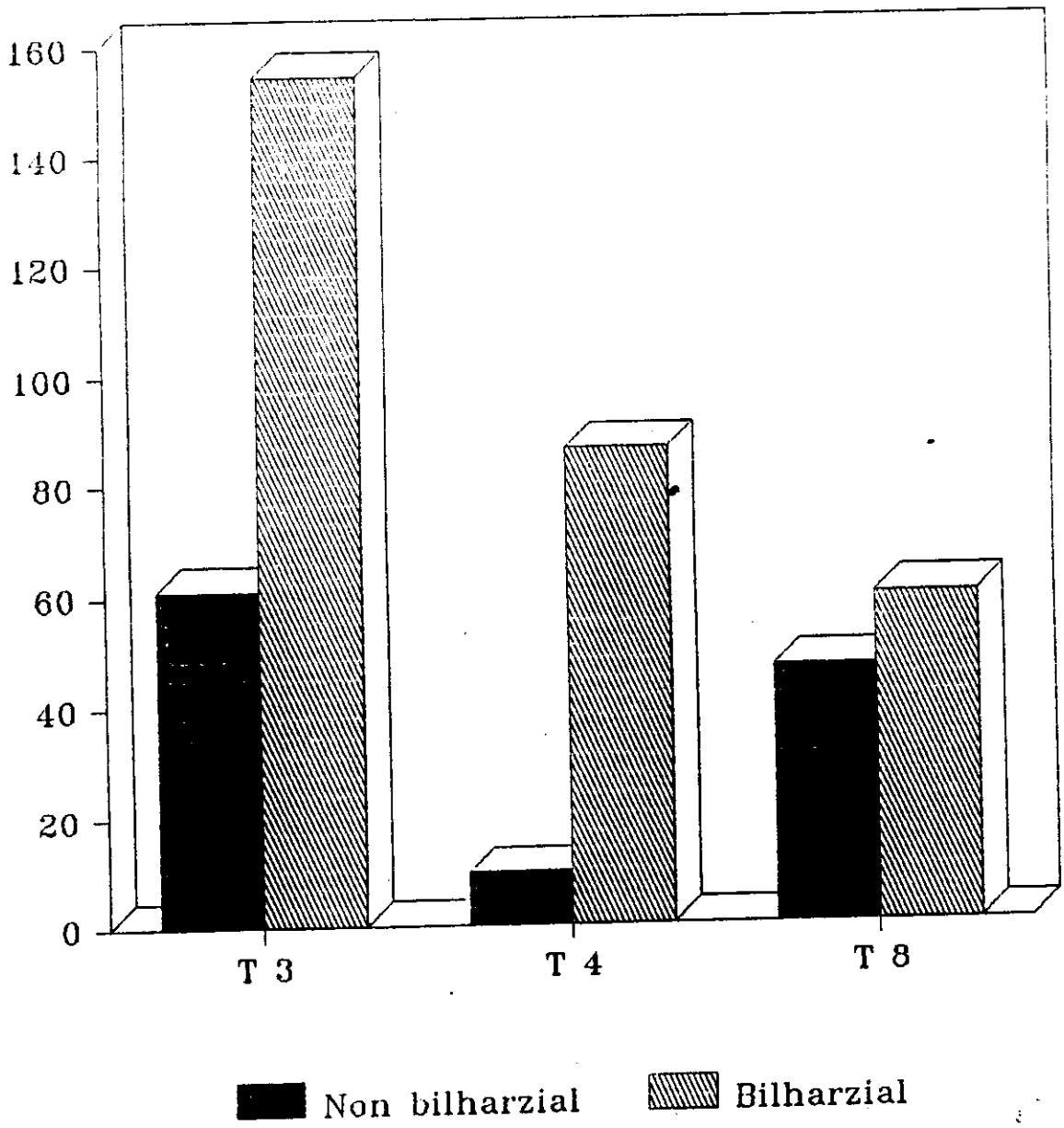
S/C = Suppresor/Cytotoxic Lymphocytes (T_8).

MAB = Monoclonal antibody.

Number of T lymphocytes in microscopic fields of bilharzial and non-bilharzial urinary bladders



Number of T lymphocytes in microscopic fields of bilharzial and non-bilharzial ureters



B-Lymphocytes:

Positive controls:

Sections in the tonsil used as positive controls showed few (+)ve cells of B-Lymphocytes in the interfollicular areas.

**** Non Bilharzial group :***

In the urinary bladder and ureter respictively. No positive B cells were detected in the epithelium and lamina propria.

**** Bilharzial group :***

The lamina propria and submucosa were infilterated with positive cells of B Lymphocytes in both urinary bladder and ureter (Fig. 22 & 23).

Macrophages :

- Urinary Bladder :

**** Non Bilharzial group :***

Cells stained by the anti-Leu M3 Monoclonal antibody, which reacts with cell surface antigens of macrophages were few in number and were detected mainly in the epithelium and lamina propria of urinary bladder (Fig. 24). The positive cells ranged from 6.10 to 14.1 with a mean of 10.29 ± 3.45. (Table 13).

**** Bilharzial group :***

Cells stained by anti-Leu M3 monoclonal antibody, were diffusely distributed in the lamina propria in close association with T cells (Table 14), (Fig. 25).

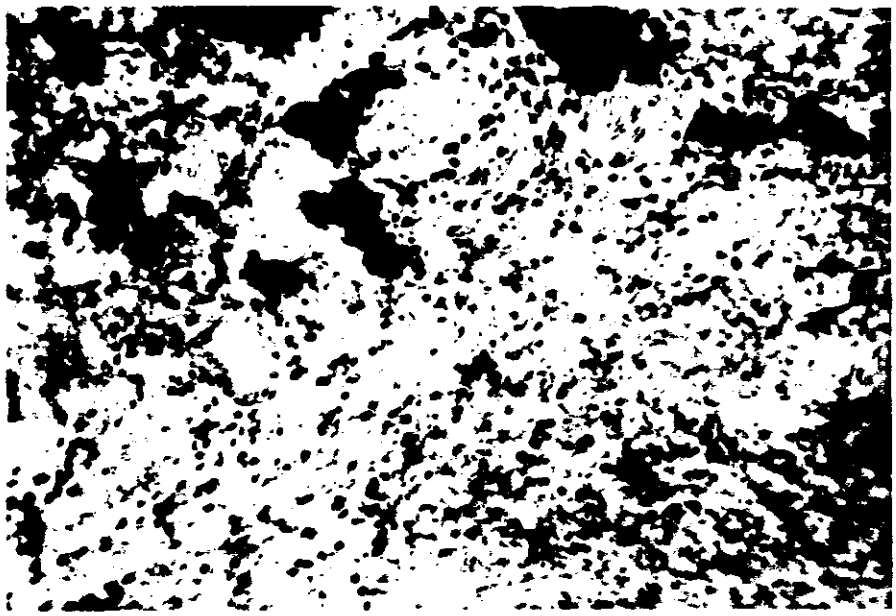


Fig. (22): A photomicrograph of a cryostat section in the U.B. of a bilharzial patient stained for all B lymphocytes with anti-B Lymphocytes Ab. and counter stained with Hx. Showing positively stained cells in lamina propria layer. (Immunoperoxidase stain, Proj. 10, Obj. 10).

Fig. (23): A photomicrograph of a cryostat section in the ureter of a bilharzial patient stained for all B Lymphocytes Ab. and counter stained with Hx. Showing positively stained cells in lamina propria layer.

(Immunoperoxidase stain, Poj. 10, Obj. 10).

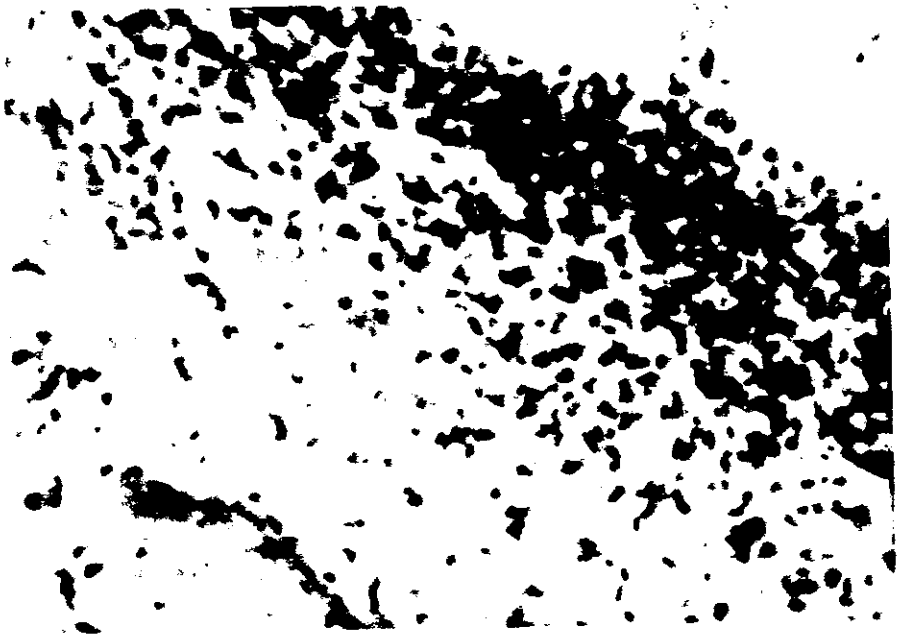


Fig. (24): A photomicrograph of a cryostat section in the U.B. of a non bilharizal man, stained for all Macrophages Ab., and counter stained with Hx. Showing positive cells within epithelium (e) and lamina propria (l).

(Immunoperoxidase stain, Proj. 10, Obj. 20).

Fig. (25): A photomicrograph of a cryostat section in the U.B. of a bilharzial patient stained for all Macrophages Ab., and counter stained with Hx., showing positive cells within lamina propria. (Immunoperoxidase stain, Proj, 10, Obj. 10).

Table 13 :

Patient No.	*Reactivity of MAB specific for Macrophages (+) ve cells in non bilharzial U.B.*
1	13.5
2	14.1
3	9.3
4	6.1
5	8.2
Mean	**10.29± 3.45**

+++ = High significance.

U.B. = Urinary Bladder

MAB = Monoclonal antibody.

Table 14 :

Patient No.	*Reactivity of MAB specific for Macrophages (+) ve cells in bilharzial U.B.*
1	18.2
2	25.6
3	62.5
4	50.8
5	39.1
6	45.3
7	71.2
8	19.9
9	35.5
10	52.1
11	27.3
12	33.7
13	80.2
14	79.1
15	68.3
16	31.9
17	21.9
18	49.3
19	39.6
20	55.5
21	23.3
22	61.8
23	15.9
24	43.3
25	29.2
26	65.7
27	37.1
28	75.2
29	28.7
30	38.3
Mean	**45.02 ± 19.1**
t	**4.0123**
D.F.	**33**
P.	**< 0.001**
Sig.	**+++**

+++ = High significance.

U.B. = Urinary Bladder

MAB = Monoclonal antibody.

- Ureter :-

** Non Bilharzial group :*

The cells were few in number and detected in epithelium and lamina propria Fig. (26). (+)ve cells ranged from 7.3 to 12.2 with a mean of 9.4 ± 1.85 (Table 15).

The (+)ve cells ranged from 15.9 to 80.2 with a mean of 45.02 ± 19.1.

** Bilharzial group :*

The (+)ve cells were distributed in lamina propria. The cells ranged from 18.4 to 82.5 with a mean of 47.9 ± 20. (Table 16 & 17).

Anti-HLADR:

- Urinary Bladder :

** Non Bilharzial group :*

Most of the mucosal cells were HLADR negative while few (+)ve ones were scattered within the epithelium and lamina propria. (Fig. 27).

** Bilharzial group :*

The lamina propria stained with the anti-HLADR antiboody was more than the control group. Fig. (28).

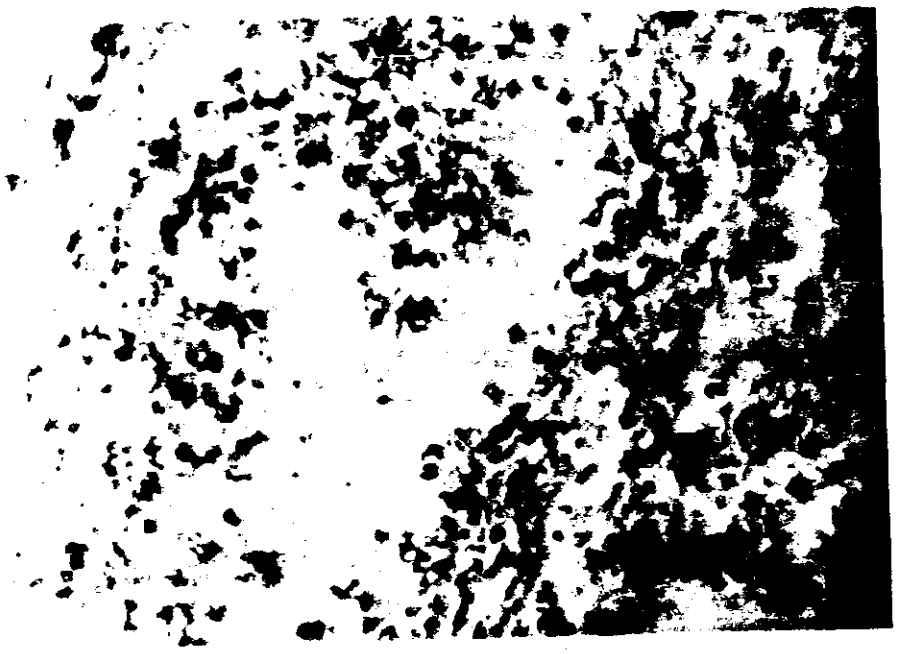


Fig. (26): A photomicrograph of a cryostat section in the ureter of a non bilharzial man., stained for all Macrophages Ab., and counter stained with Hx., showing positively cells within epithelium (e) and lamina propria (l).

(Immunoperoxidase stain, Proj. 10, Obj. 20).

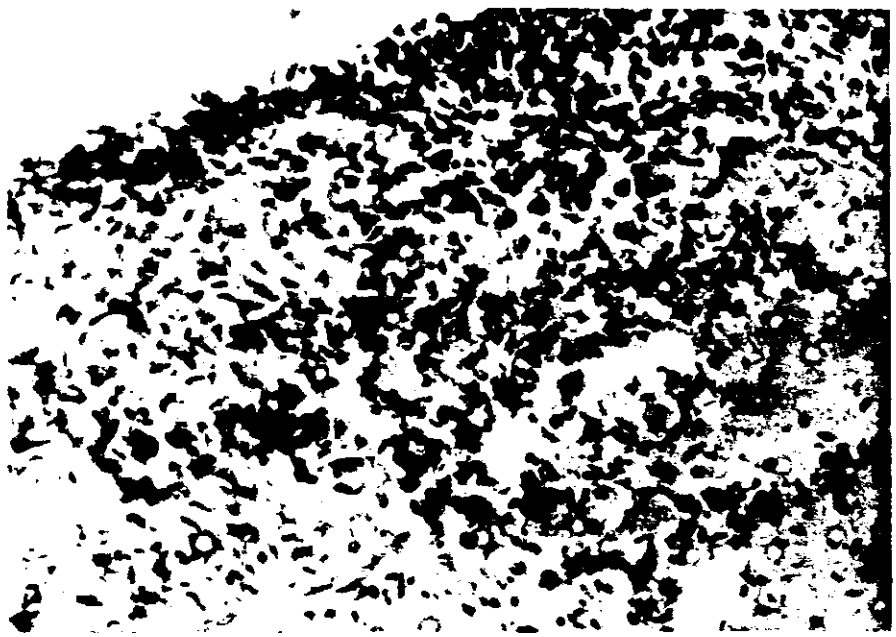


Fig. (27): A photomicrograph of a cryostat section in the U.B. of a non bilharzial man, stained for all HLADR., and counter stained with Hx. showing positive cells within epithelium (e) and lamina propria (l).

(Immunoperoxidase stain, Proj. 10, Obj. 20).

Fig.(28): A photomicrograph of a cryostat section in the U.B. of a bilharzial patient stained for all HLADR Ab., and counter stained with Hx., showing positive cells within lamina propria. (Immunoperoxidase stain, Proj. 10, Obj. 10).

Table 15

Patient No.	*Reactivity of MAB specific for Macrophages (+) ve cells in non bilharzial ureter*
1	10.1
2	9
3	12.2
4	8.5
5	7.3
Mean	**9.42±1.85**

+++ = High significance.

MAB = Monoclonal antibody.

Table (16)

Patient No.	*Reactivity of MAB specific for Macrophages (+) ve cells in bilharzial ureter.*
1	20.9
2	30.5
3	51.7
4	43.1
5	82.5
6	78.3
7	36.2
8	29.1
9	58.3
10	32.6
11	27.7
12	49.5
13	65.1
14	72.1
15	80.9
16	39.2
17	18.9
18	45.8
19	34.3
20	55.6
Mean	**47.59 ± 20.0**
t	**4.1958**
D.F.	**23**
P.	**< 0,001**
Sig.	**+++**

+++ = High significance.

MAB = Monoclonal antibody.

Number of macrophages in microscopic fields of bilharzial and non-bilharzial ureters and urinary bladders

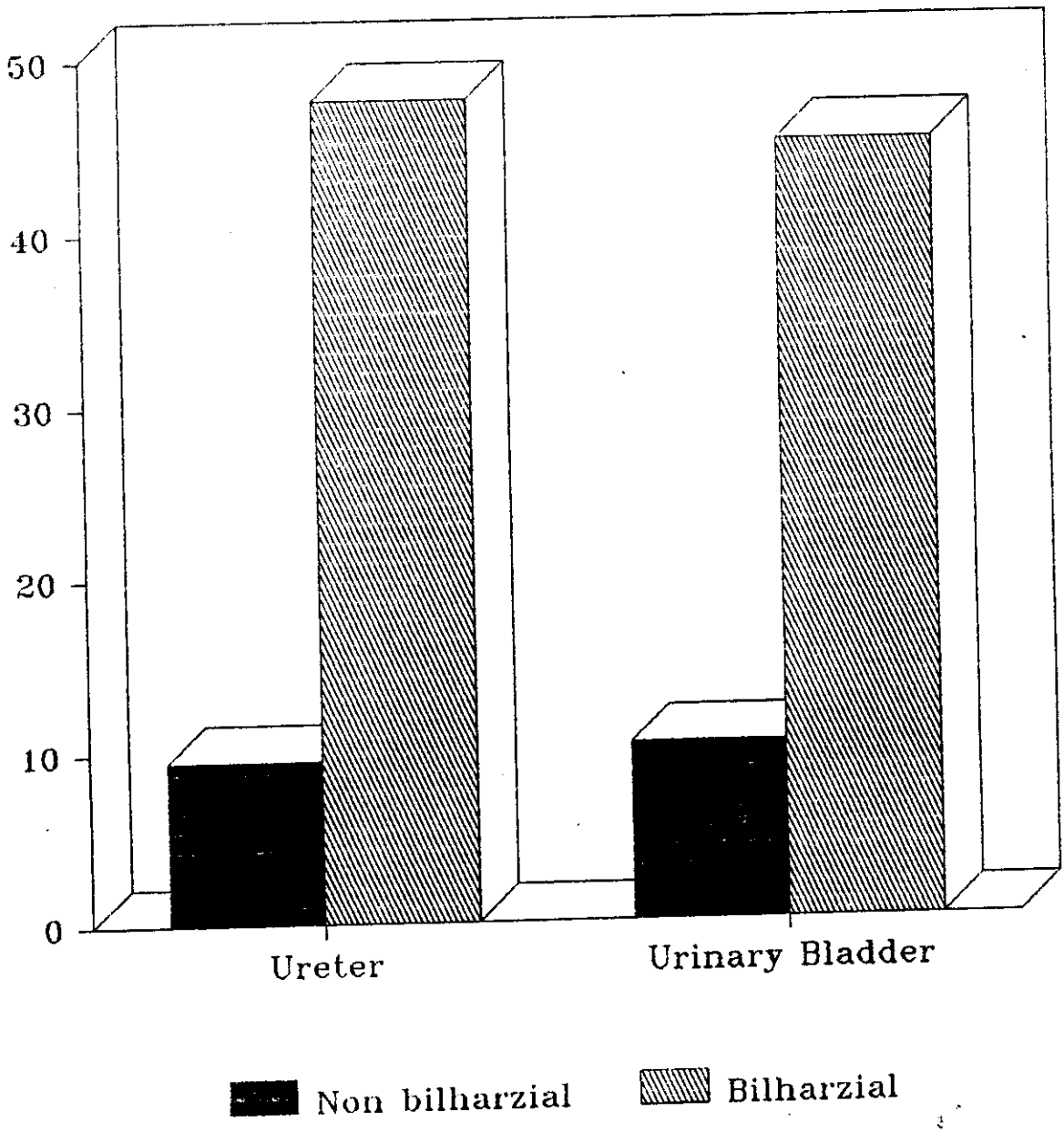


Table 17

Cell type	*Mean number of cells*		*t*	*D.F.*	*P*	*Significances*
	Non Bilharzial	*Bilharzial*				
T_3 in U.B.	33.94 ± 4.0	105.89 ± 4.0	6.1603	33	< 0.001	+++
T_3 in ureter	60.8 ± 3.78	154.35 ± 22.08	9.2945	23	< 0.001	+++
T_4 in U.B.	7.2 ± 1.53	64.73 ± 18.2	6.9772	33	< 0.001	+++
T_4 in ureter	9.5 ± 1.58	86.21 ± 16.19	10.4157	23	< 0.001	+++
T_8 in U.B.	25.92 ± 2.71	37.67 ± 8.94	2.8843	33	< 0.01	+
T_8 in ureter	46.58 ± 5.62	59.62 ± 8.54	3.2165	23	< 0.01	+
M. in Ureter.	10.24 ± 3.45	45.02 ± 19.1	4.0123	33	< 0.001	+++
M. in U.B.	9.42 ± 1.85	47.59 ± 20.0	4.1958	23	< 0.001	+++

+++ = Highly significance

\+ = Significant

T_3 = Pan T Lymphocytes

T_4 = Helper/Inducer Lymphocytes

T_8 = Suppressor/cytotoxic Lymphocytes.

M = Macrophages

- *Ureter :-*

* *Non Bilharzial group :-*

Most of the mucosal cells were HLADR negative but scattered HLADR positive cells were observed within the epithelium and within the lamina propria (Fig. 29). The distribution of HLADR positive cells were simillar to that of the T lymphocytes and macrophages.

* *Bilharzial group :*

The lamina propria stained with anti-HLADR antibody was more than the control group.

Fig. (29): A photomicrograph of a cryostat section in the ureter of a non bilharzial patient, stained for HLADR Ab., and counter stained with Hx., showing positive cells within lamina propria. (Immunoperoxidase stain, Proj. 10, Obj. 20) .