

## **RESULTS**

## R E S U L T S

### I. The results of clinical examination:

#### 1. Pemphigus vulgaris (10 cases)

The patients were between 20 - 30 years of age. They all showed generalized flaccid vesicles and bullae, on the apparently normal skin of trunk back and extremities, which ruptured leaving red oozing areas.

In 7 out of 10 cases, the eruption started in the oral mucosa. One case presented by hoarseness of voice and difficulty in swallowing. Examination of the oropharynx revealed bullae located in buccal mucosa in 4 cases out of ten. The other 6 cases presented by a shaggy denuded erosions in buccal and palatal mucosa. Indirect laryngoscopy was performed for all the above described cases, no abnormality could be detected except for the case presented by hoarseness of voice in which congestion of both vocal cords was detected.

#### 2. Lichen planus (20 cases):

The patients were between 35 - 45 years. Itching was the main presenting complaint. 16 out of 20 cases were of classical variety in whom the distribution of the lesion were mainly on the volar aspects of the wrists,

the dorsal surface of the hands, the thigh, the abdomen. 2 cases out of 26 cases were of hypertrophic type in whom the patients were presented by flat topped polygonal papule. The other 2 cases were of acute type. Oropharyngeal examination revealed typical white arborizing lines and streaks on the buccal mucosa. Involvement of the lips was observed in 3 cases out of 16 of classical variety in form of flat topped violaceous papules.

Erythema multiforme: (23 cases)

The patients were between 30 - 45 years. All the patients presented with tense bullae arising on a red background. The eruption involved all the body surface.

Oropharyngeal examination revealed shallow erosions covered by whitish pseudomembrane. The sites of involvement were found in buccal mucosa and lips.

Psoriasis (22 cases)

The patients were between 35-50 years of age. They all showed a well circumscribed papule covered by a thin silvery scale.

Three cases out of 22 showed an intraoral involvement (one case was found to be geographical tongue, the other two involve the lips and oral mucosa).

Oropharyngeal examination revealed a red beefy fissured tongue and a greyish white lesions on oral buccal mucosa.

Behcet's syndrome (5 cases)

All patients were males. They were between 25 - 35 year of age. 4 cases out of 5 cases studied, presented with pain on swallowing followed by generalized malaise, vesicle which ruptured leaving an ulcer. One case presented by ulcer on scrotum and low grade fever.

Oropharyngeal examination revealed multiple punched out ulcer with yellowish necrotic base. The sites of predilection were in buccal mucosa and tonsils.

In all the above described cases involvement of genital organ in the form of punched out ulcer was detected.

The results of clinical study of the ten cases of pemphigus

Disease	Average age of the patient	Most common site of oral lesion	Oral lesion	Skin lesion	Prognosis
Pemphigus vulgaris	20-30 years	Palatal and buccal mucosa were of importance.	Multiple bullae that soon rupture leaving large, painful ulcers.	Came after the oral one in all the cases studied.	Poor.

The results of clinical study of the twenty cases of lichen planus.

Disease	Average age of the patient	Most common site of the oral lesion.	Oral lesion	Skin lesion	Prognosis
Lichen planus	35-45 years and males are more common than females (13:7).	Cheek is the most important site in all cases.	Solitary in 7 cases and multiple lesions in 13 cases; appears as superficial ulcer surrounded by white lines or plaque.	Involvement of the volar aspects of the wrists, dorsal surface of the hands, thigh fore head. There was a mixture of different lesions including flat topped polygonal, circinate, hypertrophic papules.	Excellent with symptomatic treatment

The results of clinical study of the 23 cases of erythema multiforme

Disease	Average age of the patient	Most common site of oral lesion	Oral lesion	Skin lesion	Prognosis
Erythema multiforme	30-45 years Either male or female may be affected	<ul style="list-style-type: none"> <li>- Buccal mucosa (14 cases)</li> <li>- Lip 6 cases</li> <li>- Palatal 3 cases</li> </ul>	<p>Oral lesions were multiple, start in red macule 3 cases as macule which changed which rapidly turn into vesicle</p> <p>ned to vesicle then rupture and ulcerate. Bleeding and crusting on lips.</p>	Appear as	Good as the disease is self-limiting but annoying.

The results of the clinical study of the 22 cases of psoriasis.

Disease	Average age of the patient	Most common site of the oral lesion	Oral lesion	Skin lesion	Prognosis
Psoriasis	35-50 years 15 cases were males.	3 cases only pre- sented in oral cavity: 1. Geographical tongue. 2. Lip. 3. Oral mucosa.	red beefy tongue and greyish white lesion on buccal mucosa	Well circum- scribed papule covered by thin silvery scales.	Good with symptomatic treatment.



The clinical results of the five cases of Behcet's syndrome.

Disease	Average age of the patient	Most common site of oral lesion	Oral lesion	Skin lesion	Prognosis
Behcet's syndrome	25-35 years all were males	Mouth (buccal mucosa 4 cases) genital one case	Multiple aphthae like ulcers.	Papulo- pustular les- ions especially in genital region. Ulce- ration was the usual manifes- tations with punched out edges.	Good with treatment

## II. Results of direct immunofluorescent staining:

### Results of direct immunofluorescence studies of skin and mucous membrane biopsies from patients with pemphigus:

The immunofluorescent tests were performed in order to determine the presence of immunoglobulins in biopsies from both oral mucosa and skin. The intensity of immunoglobulins and complement depositions in oral mucosa versus skin was compared.

Thus five tests were performed in order to determine the presence of IgG, IgM,  $\bar{C}_3$ , basement membrane and intercellular substance staining. When the skin and mucous membrane biopsies from pemphigus patients were examined, the immunoglobulins were found to be more in the epidermis producing apple green fluorescence.

The test was positive in the case of IgG and  $\bar{C}_3$ , negative in the case of IgM. In all the positive cases, the intensity of fluorescence was seen to be parallel to the severity of the disease.

This was demonstrated in (90%) and (78%) for IgG from skin and oral biopsies respectively (Table 1); (100%) and (89%) for  $\bar{C}_3$  from both skin and oral biopsies

respectively. (Table 2); and nil for IgM from both skin and oral biopsies (Table 3). (Figs. 1,2,3,) showed these depositions.

Table 1: The results of immunofluorescent antibody staining for detection of IgG in oral mucosa and skin biopsies from patients with pemphigus.

Type of specimen	Total	No. of positive cases	No. of negative cases	Percentage
Skin	10	9	1	90 %
Mucous membrane (oral cavity)	9	7	2	78 %

N.B. One specimen from mucous membrane of the oral cavity was very small to be examined.

Table 2: The results of immunofluorescent antibody staining for the detection of  $\bar{C}_3$  in oral mucosa and skin biopsies from patients with pemphigus.

Type of specimen	Total No.	No. of positive cases	No. of negative cases	Percentage
Skin	10	10	-	100 %
Mucous membrane (Oral cavity)	9	8	1	89 %

Table 3: The results of immunofluorescent antibody staining  
for the detection of IgM in oral mucosa and skin  
biopsies from patients with pemphigus.

Type of specimen	Total No.	No. of positive cases	No. of negative cases	Percentage
Skin	10	-	10	Zero %
Mucous membrane (Oral cavity)	9	-	9	Zero %

Fig. 1: Direct immunofluorescent staining of skin specimen  
from pemphigus vulgaris patient showing IgG  
deposition in the region of epidermis.  
(- X 25).

Fig.2: Direct immunofluorescent staining of skin specimen from pemphigus vulgaris patient showing  $C_3$  deposition. ( X 25)

Fig.3: Direct immunofluorescent staining of oral mucosa specimen showing IgG as well as  $C_3$  deposition ( X 25).



Results of immunofluorescent staining of skin and oral  
mucous membrane biopsies from patients with Lichen  
planus:

The direct immunofluorescent study of immunoglobulin (G) and (M) as well as  $\bar{C}_3$  demonstrated the presence of cytoid bodies in the basement membrane zone. This was obvious in (80%) and (90%) for IgG from both skin and oral mucosal biopsies respectively (Table 4); (60%) and (90%) for IgM from skin and oral mucosal biopsies respectively (Table 5), Fig. 4,5; in (45%) and (85%) from skin and oral mucosal biopsies respectively for  $\bar{C}_3$  could be detected (Table 6) Fig. 4,5,6,7.

Table 4: The results of immunofluorescent antibody staining for the detection of IgG in oral mucosa and skin biopsies from patients with lichen planus.

Type of specimen	Total No.	No. of positive cases	No. of negative cases	Percentage
Skin	20	16	4	80 %
Mucous membrane (Oral cavity)	20	18	2	90 %

Table 5: The results of immunofluorescent antibody staining for the detection of IgM in oral mucosa and skin biopsies from patients with lichen planus.

Type of specimen	Total No.	No. of positive cases	No. of negative cases	Percentage
Skin	20	12	8	60 %
Mucous membrane (Oral cavity)	20	18	2	90 %

Table 6: The results of immunofluorescent antibody staining for the detection of  $C_3$  in oral mucosa and skin biopsies from patients with lichen planus.

Type of specimen	Total No.	No. of positive cases	No. of negative cases	Percentage
Skin	20	9	11	45 %
Mucous membrane (oral cavity)	20	17	3	85 %

Fig.4: Direct immunofluorescent staining of skin  
biopsy from lichen planus showing IgM, C<sub>3</sub>,  
depositions in basement membrane zone  
and dermis (cytoid bodies)

( X 10)

Fig.5: Direct immunofluorescent staining of mucous  
membrane, biopsy from a case of lichen planus  
showing  $C_3$  deposition. ( X 25)

Fig.6: Direct immunofluorescent staining of skin biopsy  
from a case of lichen planus showing IgM  
deposition in upper dermis. ( X 10).

Fig.7: Direct immunofluorescent staining of skin biopsy from a case of lichen planus showing cytoïd body deposition in the region of basement membrane. ( X 100).

Results of immunofluorescent antibody staining of skin  
and oral mucous membrane biopsies from patients with  
erythema multiforme:

IgG was demonstrated in (26%) and (84%) from both skin and oral mucosal biopsies respectively, (60%) and (95%) were positive for IgM in skin and oral mucosal biopsies respectively, (32%) and (74%) were positive for  $\bar{C}_3$  from oral and skin biopsies respectively (Tables 7,8,9) Fig. (8,9,10).



Table 7: The results of immunofluorescent antibody staining for the detection of IgG in oral mucosa and skin biopsies from patients with erythema multiforme.

Type of specimens	Total No.	No. of positive cases	No. of negative cases	Percentage
Skin	19	5	14	26 %
Mucous membrane (Oral cavity)	19	16	3	84 %

Table 8: The results of immunofluorescent antibody staining  
for the detection of IgM in oral mucosa and skin biopsies  
from patients with erythema multiforme.

Type of specimen	Total No.	No. of positive cases	No. of negative cases	Percentage
Skin	19	12	7	60 %
Mucous membrane (Oral cavity)	19	18	1	95 %

Table 9: The results of immunofluorescent antibody staining for the detection of  $\bar{C}_3$  in oral mucosa and skin biopsies from patients with erythema multiforme.

Type of specimen	Total No.	No. of positive cases	No. of negative cases	Percentage
Skin	19	6	13	32 %
Mucous membrane (Oral cavity)	19	14	5	74 %

Fig.8: Immunofluorescent antibody staining for  
intercellular substance in skin biopsy  
from a patient with erythema multiforme  
showing absence of deposition of IgG, M, C<sub>3</sub>.  
( x 10)

Fig. 9: Direct immunofluorescent staining of skin biopsy from a patient with erythema multiforme showing IgM deposition in dermis. There was no characteristic pattern of deposition.

( X 25)

Fig. 10: Direct immunofluorescent staining of oral mucosa biopsy from a case of erythema multiforme showing  $C_3$  deposition. There was no characteristic pattern of deposition.

( X 25)

Results of direct immunofluorescent staining of skin and mucous membrane biopsies from patients with psoriasis:

Immunoglobulins deposition as well as  $\overset{\vee}{C}_3$  deposition were demonstrated. This deposition was in the form of a laminar, irregular, linear patterns with dots, dashes and commas, but there was no characteristic picture of immunofluorescent deposition.

This was demonstrated in (80%) and (86%) for IgG from skin and oral biopsies respectively (Table 10) Fig. (14,15), (50%) and (64%) were positive for IgM from skin and oral biopsies respectively Table (11) Fig. (11,12,13,14,15), while (82%) and (86%) were positive for  $\overset{\vee}{C}_3$  from skin and oral biopsies respectively. Table (12) Fig. (11, 12, 13, 14, 15).

Table 10: Results of immunofluorescent antibody staining for the detection of IgG in oral mucosa and skin biopsies from patients with psoriasis.

Type of specimen	Total No. of cases	No. of positive cases	No. of negative cases	Percentage
Skin	22	18	4	82 %
Mucous membrane (Oral cavity)	22	19	3	86 %



Table 11: Results of immunofluorescent antibody staining for the detection of IgM in skin and oral mucosa biopsies from patients with psoriasis.

Type of specimen	Total No. of cases	No. of positive cases	No. of negative cases	Percentage
Skin	22	11	11	50 %
Mucous membrane (Oral cavity)	22	14	8	64 %

Table 12: Results of immunofluorescent antibody staining for the detection of  $\bar{C}_3$  in skin and oral mucosa biopsies from patients with psoriasis.

Type of specimen	Total No. of cases	No. of positive cases	No. of negative cases	Percentage
Skin	22	18	4	82 %
Mucous membrane (Oral cavity)	22	19	3	86 %

Fig.11: Direct immunofluorescent staining of oral  
mucosa biopsy specimen from psoriasis patients  
showing IgM deposition in the dermis.  
Notice that this deposition is irregular with  
dots, dashes and commas. ( X 10)

Fig. 12: Direct immunofluorescent staining of oral biopsy of psoriasis showing IgM, C<sub>3</sub> deposition in upper dermis. The deposition is irregular with dots dashes and commas. (X 10).

Fig.13: High power of above specimen direct immunofluorescent staining of oral psoriasis showing dots, dashes and comma deposition of IgM, C<sub>3</sub> in upper dermis. (X 100).

Fig. 14: Immunofluorescent staining of intercellular substance of skin biopsy specimen from patients with psoriasis showing deposition of IgG, M, C<sub>3</sub> in the intercellular spaces of dermis.  
( X 10)

Fig.15: Immunofluorescent staining of intercellular substance of skin biopsy from psoriatic patient showing IgG, M, C<sub>3</sub> in high power.  
( X 25)

Results of immunofluorescent antibody staining for the  
detection of IgG, IgM, C<sub>3</sub> from patients with Behcet,s  
syndrome:

Biopsies from cases of Behcet's disease did not  
show characteristic immunofluorescent IgG, IgM, C<sub>3</sub>  
depositions of a conclusive pattern.

Results of immunofluorescent antibody staining of  
intercellular substance and basement membrane:

The results of immunofluorescent staining of intercellular substance and basement membrane did not differ from the above mentioned results obtained in all five diseases.

III. Results of histopathological examinations:

Results of histopathological examination of biopsies  
from the skin and oral mucous membrane from patients  
with pemphigus (Ten cases):

Out of the ten cases under test, nine cases showed the characteristic changes of pemphigus, and the size of one specimen was very small to be examined.

All the cases were of the pemphigus vulgaris type and showed the characteristic histopathological features by the presence of acantholysis which was located immediately above the basal cell layer, acantholytic cells were found singly or in clusters in the bullae cavity. In older lesions, inflammatory cells were present chiefly neutrophils, lymphocytes . Fig. 16.



Fig. 16: Bulla cavity of oral pemphigus vulgaris  
containing many acantholytic cells singly  
and in clusters.  
( X 200).

Results of histopathological examination of biopsies from  
the skin and oral mucous membrane from patients with  
Lichen planus (20 cases)

Out of the twenty cases presented as oral lichen planus, only two cases did not show the characteristic features of the lesion. In all the positive cases, there were parakeratosis, infiltration of the upper dermis by a broad band of lymphocytes with neutrophils, acanthosis in a variable amounts.

In skin specimens, the lesion showed the classical changes of lichen planus discussed before in (16) cases while (2) cases of the disease were of hypertrophic type and (2) cases were of the acute type.

These findings were shown in Fig. 17,18,19.

Fig.17: Lichen planus of the oral mucosa showing hyperkeratosis, parakeratosis, focal hypergranulosis, acanthosis, liquefaction degeneration of the basal cell layer and a band like infiltrate in the upper dermis. (H. and E X 100).

Fig.18: Oral lichen planus showing hyperkeratosis  
parakeratosis, focal hypergranulosis,  
acanthosis liquefaction degeneration of  
the basal cell layer and band like infiltrate  
in the upper dermis. (H. & E X 100).

Fig.19 : Lichen planus of the skin showing hyperkeratosis, irregular acanthosis and the predominantly lymphocytic dermal infiltrate.  
(H. & E X 100).

Results of Histopathological examination of biopsies  
from the skin and oral mucous membrane of cases of  
erythema multiforme: (23 cases)

Out of the 23 cases, 4 cases did not exhibit the characteristic histopathological lesions of the disease. In all positive oral lesions there were zone of liquefactive degeneration in upper epithelium, intra or subepithelial vesicle, absence of basement membranes, varying degree of inflammatory infiltration beneath the epithelium (eosinophil, polymorphonuclear leukocytes, lymphocytes, plasma cells).

These findings were shown in Fig. (20, 21).

Fig. 20: Erythema multiforme skin biopsy, showing non specific infiltration with polymorph-nuclear leukocytes, eosinophils, lymphocytes, attempt to vesicle formation with the roof being the whole thickness of epithelium. (H. & E. 6 X 20).

Fig.21: Oral erythema multiforme, showing non specific inflammation with preponderance of neutrophils, plasma cell, mononuclear cells obscuring the basement membrane area. Subepithelial vesicle.  
(H. & E 6 X 10).



Fig. 22: Oral psoriasis, showing papillomatosis, parakeratosis and acanthosis with clubbing of the connective tissue papillae. Perivascular infiltration with lymphohistiocytes, vasodilatation, neutrophilic infiltration in the upper epithelial layers.  
H. & E (6 X 10).

Fig. 23: Oral psoriasis, showing papillomatosis, parakeratosis and acanthosis with clubbing of the connective tissue papillae. Vasodilatation and perivascular lymphohistiocytic infiltration in the papillae. (6x10)

Fig.24: Psoriasis skin biopsy, showing regular elongation of the rete ridges with thickening of the lower portion, leading to acanthosis, elongation and oedema of dermal papillae with dilated tortuous capillaries and mild mononuclear cell infiltration, parakeratosis, thinning of the upper portion of the epidermis. H. & E (6 X 10).

Fig.25: Psoriasis skin biopsy, showing regular elongation of the rete ridges with thickening of the lower portion (acanthosis), elongation and oedema of dermal papillae with dilated capillaries and perivascular infiltration with neutrophils mononuclear cells, parakeratosis, the granular layer is absent.

H. & E. (6 X 10).

Fig. 26: Psoriatic tongue, showing papillomatosis, parakeratosis and acanthosis with clubbing of the connective tissue papillae vasodilatation and perivascular lymphohistocytic infiltration and neutrophilic infiltration in the upper epithelial layers. Notice pallor in upper portion of epidermis.  
H. & E. (6 X 10).

Results of histopathological examination of biopsies  
from the skin and oral mucous membrane of cases of  
Behcet's disease (5 cases):

All cases showed the usual picture of the disease which are: non specific inflammation with preponderance of polymorphonuclear cell infiltration around the ulcer; perivascular infiltration with lymphocytes and plasma cells could be found.

These changes are shown in Fig. 27 .

Fig. 27: Behcet's disease oral biopsy, showing non specific inflammation with preponderance of polymorphonuclear cell infiltration around the ulcer. Perivascular infiltration with lymphocytes and plasma cells.

H. & E (6 X 20).

Table 13: Percentage of positive oral histopathological specimens in different skin diseases presenting in oropharynx.

Disease	Total No.	No. of positive oral specimens	No. of negative oral specimens	Percentage of positive oral specimens.	Fault in technique
1. Pemphigus	10	9	-	100%	1
2. Lichen planus	23	21	2	91.30%	-
3. Erythema multiforme	22	18	4	81.82	-
4. Psoriasis	20	3	17	15 %	-
5. Behcet's disease	5	5	-	100 %	-



#### IV. Results of cytological examination:

Eighty cases were examined cytologically by the methods described before. They were divided as follows:

##### 1. Pemphigus (10 cases):

On cytological examination, such cases exhibits the following characters:

(1) A great number of epithelial cells could be detected. The cells were of uniform shape and revealed cyanophilic cytoplasm with a small halo of highly staining cytoplasm around the nuclei and a rim of darker staining cytoplasm at the periphery. The acantholytic cells (Tzanck cells) are demonstrated uniformly in nuclear size, hyperchromasia and nuclear enlargement.

(2) Few inflammatory cells were present beside the characteristic acantholytic cells.

These could be shown in Fig. 28.

##### 2. Lichen planus (23 cases)

There were no characteristic cytological pattern.

3. Erythema multiforme (22 cases)

The cytological examination revealed necrotic epithelial debris and blood cells (neutrophils erythrocytes, eosinophils). No characteristic pattern for lesion was detected. This was shown in Fig. 29.

4. Psoriasis (20 cases)

The sections did not show any characteristic changes.

5. Behcet's disease (5 cases)

The sections did not show any characteristic changes.

Fig. 28: Smear from oral cavity of pemphigus patient showing acantholytic cells with densely stained cytoplasm, pale halo and large uniform nuclei.

H. & E. ( X 120 ).

Fig. 29: Bullous erythema multiforme, smear showing necrotic debris, polymorphonuclear lymphocytes, eosinophils but no acantholytic cells.

( X 120 ).

V. Results of tissue culture inoculation:

The number of skin biopsy specimens that caused cytopathogenic changes upon inoculation into Vero cell cultures during the first and second passages were 90% of specimens. After the third passage, there were only 3 specimens that gave cytopathogenic effect (CPE), these specimens were from erythema multiforme patients.

Results of neutralization test with reference antiserum to herpes virus:

The viral isolates from the biopsy specimens belonging to the 3 cases of erythema multiforme were not herpes virus as indicated by the lack of neutralization of the cytopathogenic effect by antiserum against herpes virus up to the 7th day of observation of the test.

Detection of herpes virus isolates by the direct immunofluorescence test using Monoclonal antibody (fluorescein-labelled):

Three cases out of fifteen Vero tissue culture viral isolates were identified as herpes virus by the

development of the characteristic immunofluorescence of herpes virus antigens under the fluorescent microscope. These herpes virus isolates were from skin biopsies obtained from erythema multiforme patients.

Table 13: Herpes virus isolation in Vero cell culture after inoculation  
with skin biopsy obtained from different skin diseases.

Specimen of different skin diseases	No. of cases studied	Possible viral isolate number	Identified herpes virus
1. Pemphigus	10	-	-
2. Psoriasis	20	-	-
3. Erythema multiforme	18	15	3
4. Lichen planus	23	-	-
5. Behcet's Syndrome	5	-	-

Table 14:

Disease	Specimen	S K I N					O R A L M U C O S A							
		H & E*	F. A. G	M	C <sub>3</sub>	Virus isolation (Herpes simplex)**	Cytology	H & E	F. A. G	M	C <sub>3</sub>	Virus isolation	Cytology	
Pemphigus vulgaris	1	Grade IV	+ve	-ve	+ve	+ve	+ve	The size of the specimen was very small to be examined						
	2	Grade III	+ve	-ve	+ve	-ve	+ve	Grade IV	+ve	-ve	+ve	-ve	-ve	
	3	Grade IV	+ve	-ve	+ve	+ve	+ve	Grade IV	+ve	-ve	+ve	-ve	-ve	
	4	Grade IV	+ve	-ve	+ve	+ve	-ve	Grade III	+ve	-ve	+ve	-ve	-ve	
	5	Grade III	+ve	-ve	+ve	+ve	+ve	Grade IV	-ve	-ve	+ve	-ve	-ve	
	6	Grade II	-ve	-ve	+ve	+ve	+ve	Grade III	+ve	-ve	+ve	+ve	+ve	
	7	Grade IV	+ve	-ve	+ve	+ve	+ve	Grade III	-ve	-ve	-ve	-ve	-ve	
	8	Grade III	+ve	-ve	+ve	+ve	+ve	Grade IV	+ve	-ve	+ve	-ve	-ve	
	9	Grade III	+ve	-ve	+ve	+ve	+ve	Grade IV	+ve	-ve	+ve	+ve	+ve	
	10	Grade IV	+ve	-ve	+ve	+ve	+ve	Grade IV	+ve	-ve	+ve	+ve	+ve	

\* See key for grading lesions as stated in methods page

\*\* There were virus isolates inducing cytopathogenic changes in Vero cell cultures during 1st and 2nd passages only, and unidentified due to lack of reference antisera.

+ve = those cases that gave CPE during 1st and 2nd passage

+ve = Positive for herpes simplex virus.



Disease	Specimens		F.A.			Virus isolation (Herpes simplex)	Cytology	H & E		F.A.			Virus isolation	Cytology
			H & E	G	M	C <sub>3</sub>				G	M	C <sub>3</sub>		
Lichen Planus	1	Grade III	+ve	+ve	+ve	-ve	+ve	Grade IV	+ve	+ve	+ve	+ve		
	2	Grade IV	+ve	-ve	-ve	-ve	+ve	Grade IV	+ve	+ve	+ve	+ve		
	3	Grade III	+ve	+ve	+ve	+ve	+ve	Grade III	+ve	+ve	+ve	+ve		
	4	Grade IV	+ve	+ve	+ve	+ve	+ve	Grade IV	+ve	+ve	+ve	+ve		
	5	Grade III	-ve	-ve	+ve	-ve	+ve	Grade III	-ve	-ve	-ve	-ve		
	6	Grade I	-ve	-ve	-ve	-ve	+ve	Grade III	+ve	+ve	+ve	+ve		
	7	Grade IV	+ve	+ve	+ve	+ve	+ve	Grade 0	+ve	+ve	+ve	+ve		
	8	Grade IV	+ve	+ve	-ve	-ve	-ve	Grade IV	+ve	+ve	+ve	+ve		
	9	Grade III	+ve	+ve	+ve	+ve	+ve	Grade III	+ve	+ve	+ve	+ve		
	10	Grade 0	-ve	-ve	-ve	-ve	+ve	Grade IV	+ve	+ve	+ve	+ve		
	11	Grade III	+ve	+ve	+ve	+ve	+ve	Grade 0	-ve	-ve	-ve	-ve		
	12	Grade IV	+ve	+ve	+ve	+ve	+ve	Grade IV	+ve	+ve	+ve	+ve		
	13	Grade IV	-ve	+ve	+ve	-ve	+ve	Grade III	+ve	+ve	+ve	+ve		
	14	Grade III	+ve	-ve	-ve	-ve	+ve	Grade III	+ve	+ve	+ve	+ve		
	15	Grade III	+ve	+ve	+ve	+ve	+ve	Grade IV	+ve	+ve	+ve	+ve		
	16	Grade II	+ve	+ve	-ve	-ve	-ve	Grade III	+ve	+ve	+ve	+ve		
	17	Grade II	+ve	+ve	-ve	-ve	+ve	Grade IV	+ve	+ve	+ve	-ve		
	18	Grade IV	+ve	+ve	+ve	+ve	+ve	Grade IV	+ve	+ve	+ve	+ve		
	19	Grade III	+ve	+ve	+ve	+ve	+ve	Grade IV	+ve	+ve	+ve	+ve		
	20	Grade II	+ve	+ve	-ve	-ve	+ve	Grade III	+ve	+ve	+ve	+ve		

N E G A T I V E

Table 16:

Disease	Specimens	S K I N					O R A L M U C O S A						
		H & E	G	F.A. M	C <sub>3</sub>	Virus isolation (Herpes simplex)	Cytology	H & E	G	F.A. M	C <sub>3</sub>	Virus isolation	Cytology
Erythema multiforme	1	Grade III	+ve	+ve	+ve	+ve		Grade II	+ve	+ve	+ve		
	2	Grade II	-ve	-ve	-ve	+ve		Grade II	+ve	+ve	+ve		
	3	Grade III	-ve	-ve	-ve	+ve		Grade III	-ve	+ve	+ve		
	4	Grade III	+ve	+ve	+ve	+ve (Herpes)		Grade IV	+ve	+ve	+ve		
	5	Grade II	-ve	-ve	-ve	+ve		Grade IV	+ve	+ve	+ve		
	6	Grade 0	-ve	-ve	-ve	-ve		Grade 0	-ve	-ve	-ve		
	7	Grade I	-ve	-ve	-ve	+ve		Grade I	+ve	+ve	+ve		
	8	Grade II	-ve	+ve	-ve	+ve		Grade II	+ve	+ve	+ve		
	9	Grade III	-ve	+ve	+ve	+ve		Grade IV	-ve	-ve	+ve		
	10	Grade II	-ve	+ve	+ve	-ve		Grade II	+ve	+ve	+ve		
	11	Grade III	-ve	+ve	-ve	+ve		Grade III	+ve	+ve	+ve		
	12	Grade II	+ve	+ve	+ve	+ve (Herpes)		Grade IV	+ve	+ve	+ve		
	13	Grade III	-ve	+ve	+ve	+ve		Grade II	+ve	+ve	-ve		
	14	Grade III	-ve	+ve	-ve	+ve		Grade II	+ve	+ve	-ve		
	15	Grade III	-ve	+ve	+ve	+ve		Grade III	+ve	+ve	+ve		
	16	Grade III	-ve	+ve	+ve	+ve		Grade III	+ve	+ve	+ve		
	17	Grade 0	-ve	-ve	-ve	-ve		Grade 0	-ve	-ve	-ve		
	18	Grade 0	-ve	-ve	-ve	-ve		Grade 0	-ve	-ve	-ve		
	19	Grade III	-ve	-ve	-ve	-ve		Grade II	+ve	+ve	+ve		
	20	Grade II	+ve	+ve	+ve	+ve (Herpes)		Grade III	+ve	+ve	+ve		
	21	Grade 0	-ve	-ve	-ve	-ve		Grade 0	-ve	-ve	-ve		
	22	Grade III	-ve	-ve	-ve	-ve		Grade II	+ve	+ve	-ve		
	23	Grade II	+ve	+ve	+ve	-ve		Grade II	-ve	+ve	-ve		

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NEGATIVE

N E G A T I V E

Table 17:

Disease	Specimens	S K I N					O R A L M U C C O S A					
		H & E	G	F.A. M	C <sub>3</sub>	Virus isolation (Herpes simplex)	Cytology	H & E	G	F.A. M	C <sub>3</sub>	Virus isolation
Psoriasis	1	Grade III	+ve	+ve	+ve	+ve	Grade 0	+ve	+ve	+ve	+ve	-ve
	2	Grade II	+ve	+ve	+ve	+ve	Grade 0	+ve	+ve	+ve	+ve	-ve
	3	Grade IV	+ve	+ve	+ve	+ve	Grade IV	+ve	+ve	+ve	+ve	-ve
	4	Grade III	+ve	+ve	+ve	+ve	Grade 0	-ve	-ve	-ve	-ve	-ve
	5	Grade IV	+ve	+ve	+ve	+ve	Grade 0	+ve	+ve	+ve	+ve	-ve
	6	Grade II	+ve	-ve	-ve	-ve	Grade 0	+ve	+ve	+ve	+ve	-ve
	7	Grade IV	+ve	+ve	+ve	+ve	Grade 0	+ve	+ve	+ve	+ve	-ve
	8	Grade II	-ve	+ve	+ve	+ve	Grade 0	-ve	-ve	-ve	-ve	-ve
	9	Grade IV	+ve	+ve	+ve	+ve	Grade 000	+ve	+ve	+ve	+ve	-ve
	10	Grade IV	+ve	-ve	-ve	+ve	Grade 0	+ve	+ve	+ve	+ve	-ve
	11	Grade II	+ve	-ve	-ve	+ve	Grade 0	+ve	-ve	-ve	-ve	-ve
	12	Grade 0	-ve	-ve	-ve	-ve	Grade 0	+ve	-ve	-ve	-ve	-ve
	13	Grade III	+ve	+ve	+ve	+ve	Grade 0	+ve	+ve	+ve	+ve	-ve
	14	Grade II	+ve	-ve	-ve	+ve	Grade 0	+ve	+ve	+ve	+ve	-ve
	15	Grade III	+ve	+ve	+ve	+ve	Grade 0	+ve	-ve	-ve	-ve	-ve
	16	Grade IV	+ve	-ve	-ve	+ve	Grade IV	+ve	+ve	+ve	+ve	-ve
	17	Grade 0	-ve	-ve	-ve	-ve	Grade 0	+ve	+ve	-ve	-ve	-ve
	18	Grade I	-ve	-ve	-ve	-ve	Grade 0	+ve	+ve	+ve	+ve	-ve
	19	Grade III	+ve	+ve	+ve	+ve	Grade 0	-ve	+ve	+ve	+ve	-ve
	20	Grade IV	+ve	-ve	-ve	+ve	Grade 0	+ve	+ve	+ve	+ve	-ve
	21	Grade II	+ve	-ve	-ve	+ve	Grade 0	+ve	+ve	+ve	+ve	-ve
	22	Grade III	+ve	-ve	-ve	+ve	Grade 0	+ve	+ve	+ve	+ve	-ve

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Table 18 :

Disease	Specimens	S K I N					O R A L M U C O S A				
		H & E		F.A.		Virus isolation (Herpes simplex)	Cytology		H & E		F.A.
		G	M	G	M	C <sub>3</sub>	G	M	G	M	C <sub>3</sub>
Behcet's Syndrome	1	Grade III	-ve	-ve	-ve	+ve	Grade III	-ve	-ve	-ve	-ve
	2	Grade IV	-ve	-ve	-ve	+ve	Grade IV	-ve	+ve	+ve	-ve
	3	Grade IV	-ve	-ve	-ve	-ve	Grade IV	+ve	+ve	+ve	+ve
	4	Grade III	-ve	-ve	-ve	+ve	Grade IV	-ve	-ve	-ve	-ve
	5	Grade II	-ve	-ve	-ve	+ve	Grade III	-ve	-ve	-ve	-ve