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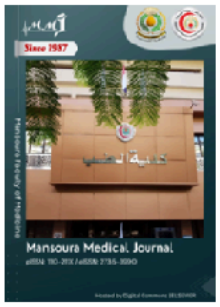

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CLINICAL TYPES OF PANNUS

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CLINICAL TYPES OF PANNUS

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INTRODUCTION

Pannus is one of the Clinical manifestations of corneal diseases. This work is to study the present status of the different clinical and aetiological types of corneal pannus .

- Pannus is presented by corneal neovascularization and cellular infiltration. The proportion between these two elements gives rise to the different forms whether thin (Tineous), vascular (Vasculosus) or fleshy (Carnosus) .

- These pathological changes either affects a segment of the cornea as in phlyctenulosis or be annular as in trachoma .

- Pannus is progressive at first then it regress either by treatment or spontaneously, leaving the cornea clear or with a scar (Siccus) .

- The pannus is sometimes follicular as in trachoma described by Herbert as (Rosette) which heals by leaving (Pits) .

Many diseases resulted in pannus formation such as :

1- Chlamydial infection with (Trachoma) which may attain any of the clinical forms mentioned above or (Inclusion Conjunctivitis) in which there is superior micropannus or (Lympho - Granuloma Venereum) with heavy vascular pannus .

2- Viral infections as (Molluscum Contagiosum) with superior vascular micropannus and (Herpes Simplex)

with unilateral pannus.

3- Bacterial infection by (Leprosy) with Pannus in upper outer quadrant, (Syphilis) retro- corneal pannus of Kruckmann and (Tuberculosis) with unilateral sectorial pannus.

4- Parasitic infestation by (Leishamaniasis) which produces vascular pannus and (Onchocerciasis) which is manifested by thin pannus .

5- Superior Limbic Kerato-conjunctivitis of Theodore (1970) with Micropannus .

6- Allergic conditions as (Spring Catarrh= Vernal Blenorrhea) with gelatinous annular pannus characterized by Tranta's spots and (Phlyctenulosis) with thin superficial thin vascular and finally as scrofulous pannus .

7- Dermatological diseases as (Ocular Pemphigoid) with circumferential pannus, (Acne Rosacea), (Keratitis, Ichthyosis, Deafness KID syndrome) manifested by superficial annular pannus, (Lyell's disease = Toxic Epidermal Necrolysis) and (Sieman's disease =Keratosis Follicularis Spinulosa Decalvans) with circumferential pannus.

8- Nutritionel deficiencies as (Ariboflavinosis B2) which produces annular vascalar pannus and (Pellagra B_7) .

9- Auto-Immune diseases as (Sjogrens disease) Kerato-conjunctivitis Sicca .

10- Degenerative conditions as (Absolute Glaucoma) associated with hyaline degenerations .

11- Endocrinal disturbances as (Hypoparathyroidism) with superior vascular pannus .

12- Trauma with (Soft contact lens) after prolonged use manifested by upper superficial vascular pannus.

13- Toxic drug reactions as (Antivirals: IDU, Adenine Arabinoside),

(Antibiotics : neomycin, gentamycin, tetracycline, chloramphenicol), (Miotics: eserine. Pilocarpine), (Mydriatics : Atropine), (Preservatives: Benzalkonium, Thimerosal).

Subjects and Methods

All patients attending the ophthalmic out-patient clinic of Mansourah university hospital were examined and those who had pannus were selected and asked about past and present history and about previous treatment and any systemic diseases .

Those patients were examined by slit lamp using diffuse illumination, slit beam and cobalt blue filter after staining with fluorescein. Any associated pathology of the cornea was examined and photographed such as oedema, ulcers, cellular infiltration, neovascularization degenerations and scars .

Two masses were excised and examined pathologically .

DISCUSSION

* Trachomatous pannus is still the commonest clinical type despite th marked decrease of incidence of trachoma, the patients are mainly from rural areas with low hygienic condition in poor ignorant classes, the incidence is preponderant in females, the age incidence is from 6 months up to 2 years; the same as reported by Fahmy (1958) .

The pannus was mainly bilateral (Sobhi 1958) .

Scars were constant in cornea and upper tarsal conjunctiva .

The resultant corneal scar diminishes the vision by the opacity and the cicatricial corneal astigmatism .

Many cases were associated with other corneal pathology such as : corneal ulcers, Keratectasia, hyaline degeneration and Salzmann's nodular degeneration .

Excision biopsy of 2 masses shows in one pseudoepitheliomatous hyperplasia and in the other epithelial plaque (Mortada 1962) . Always

pannus was associated with upper tarsal conjunctival follicles and/ or papillae and scar .Some cases had Herbert's rosette with dichotomous neovascularization .

* Vernal pannus was met with in summer months in severe cases of spring catarrh . The average age was II years with male preponderance 80 % (Tobgy 1933) . This pannus was more common in the upper part. A characteristic feature of vernal pannus is white hyaline Tranta's spots. It has straight neovessels.

* Phlyctenular pannus : The average age was 6 years and more common in females 65 %, of poor communities. It was more predominant in spring . It affects any part of the cornea. Pannus is thin and had straight neovessels (Hassan 1968).

* Glaucomatous pannus : it was found in eyes with absolute glaucoma associated with bullous keratopathy (Peyman 1980) .

* Leprotic pannus was found in very chronic cases associated with other complicattons as uveitis and glaucoma .

* Herpetic pannus was found in resistant recurrent cases (Grayson 1979) .

* Traumatic pannus due to prolonged use of soft contact lenses was met with in a case of bilateral extended wear contact lenses after prolonged wearing continuously for 6 months (Dixon 1967) .

RESULTS

TOTAL NUMBER : 100 EYES
SEX INCIDENCE : FEMALES 60 % MALES 40%
AGE INCIDENCE :

TYPE OF PANNUS	AGE IN YEARS	
	RANGE	MEAN
TRACHOMATOUS	1-2	1.5
PHLYCTENULAR	4-12	6
VERNAL	6-20	11
GLAUCOMATOUS	50-80	60
LEPROTIC	40-60	50
HERPETIC	20-40	30
SOFT C.L.	20	20

CLINICAL AND ETIOLOGICAL TYPES :

TYPE OF PANNUS	%
TRACHOMATOUS	45
VERNAL	27
GLAUCOMATOUS	13
PHLYCTENULAR	9
LEPROTIC	3
HERPETIC	2
SOFT C.L.	1

LATERALITY

TYPE OF PANNUS	BILATERAL	UNILATERAL
TRACHOMATOUS	80 %	20 %
VERNAL	90 %	10 %
PHLYCTENULAR	100%	--
GLAUCOMATOUS	100%	--
LEPROTIC	100%	--
HERPETIC	---	100%
SOFT C.L.	100%	--

ASSOCIATED CORNEAL PATHOLOGY

CORNEAL PATHOLOGY	NUMBER
ARCUS SENILIS	13
DEGENERATIONS	11
HYALINE	7
SALZMANN	4
ULCERS	10
DENDRITIC	2
TRACHOMATOUS	6
PHLYCTENULAR	1
CATARRHAL	1
PTERYGIA	7
KERATECTASIA	3
MASSES	2
EPITHELLAL HYPERPLASLA	1
EPITHELLAL PLAQUE	1

REFERENCES

1- **Attiah M.A.H. (1958):** The evolution of treatment of trachoma . Bull. Ophtalmol. Soc . Egypt, 51 : 15.

2- **Dixon J.M. (1967) :** Corneal vascularization due to corneal contact lenses. Trans. Amer. Ophthalmol. Soc. 65: 33.

3- **Duke-Elder S. (1065) :** System of Ophthalmology, Vol. VIII part I, P. 280, 287, 411, 469, 888. Henry Kimpton, London.

4- **El- Cammal Y. (1958) :** The pathology of trachoma. Bull. Ophthalmol. Soc; Egypt, 51 : 89-106 .

5- **Fahmy A.R. (1958) :** Clinical aspects of trachoma. Bull. Ophthalmol. Soc. Egypt, 51: 67-73 .

6- **Grayson M. (1979) :** Disease of the cornea. Herpes simplex Hominis, P. 118. The C.V. Mosby Co. St. Louis .

7- **Hassan A.M. (1968) :** Phlyctenulosis of conjunctiva and cornea investigation of its relationship of endogenous infections and Vitamin deficiency with special study of the histopathology. M. Ch. Thesis .

8- **Kamel S. (1958) :** Epidemiology of trachoma in Egypt. Bull. Ophthalmol. Soc . Egypt., 51 : 59.

9- **Mortada A. (1962) :** Epithelial plaques. Brit. J. Ophthalmol., 46: 248.

10- **Peyman G.A; Sanders D.R.; and Goldberg M.F. (1980) :** principles and practice of Ophthalmology, Vol. I, P. 300, W.B. Saunders Company, Philadelphia.

11- **Sobhi M. (1958) :** Clinical aspects of trachoma and acute Ophthalmia. Bull. Ophthalmol. Soc. Egypt, 51: 78.

12- **Tobgy A.F. (1933)** Keratitis Epithelialis Vernalis. Rep. Giza Memo. Ophthal. Lab. 8 : 103.

ملخص البحث

أجرى هذا البحث لدراسة الأنواع الاكلينيكية لسبل القرنية الموجودة بالمرضى المترددين على العيادة الخارجية بمستشفى المنصورة الجامعى .

١ - كان المجموع الكلى لعدد الحالات ١٠٠ عين ٦٠٪ من الاناث ، ٤٠ ٪ من الذكور

٢ - وكانت الأنواع الاكلينيكية كالاتى :

سبل الرمد الحبيبى ٤٥ ٪ - سبل الرمد الربيعى ٢٧ ٪

سبل الجلوكوما الضامره ١٣ ٪ - سبل الرمد البشرى ٩ ٪

سبل الجزام ٣ ٪ - سبل الهربس ٢ ٪

سبل بسبب الإستخدام الطويل للعدسات الرخوة الملتصقة ١ ٪

٣ - وكان متوسط أعمار المرضى كالاتى :

سبل الرمد الحبيبى ١٫٥ سنة - سبل الرمد البشرى ٦ سنوات

سبل الرمد الربيعى ١١ سنة - سبل العدسات الملتصقة ٢٠ سنة

سبل الهربس ٣٠ سنة - سبل الجزام ٥٠ سنة

سبل الجلوكوما ٦٠ سنة

٤ - وكانت نسبة السبل فى عين واحدة :

الهربس ١٠٠ ٪ ، الرمد الحبيبى ٢٠ ٪ ، الرمد الربيعى ١٠ ٪ ،

أما سبل العينين فكان :

١٠٠ ٪ فى كل من الرمد البشرى والجلوكوما والجزام والعدسات الملتصقة

٩٠ ٪ فى الرمد الربيعى - ٨٠ ٪ فى الرمد الحبيبى

٥ - ووجد مع السبل فى بعض الحالات تغيرات باثولوجية أخرى بالقرنية كالاتى :

حلقة الشيخوخة فى ١٣ عين - تحللات بالقرنية فى ١١ عين

قرحة بالقرنية فى ١٠ عيون - ظفرة فى ٧ عيون

بروز مخروطى بالقرنية فى ٣ عيون - أورام حميدة فى ٢ عين .