

VERNAL CONJUNCTIVITIS*

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MUCH has been published on this subject (Duke-Elder, 1938; Gutmann, 1945). The present study is intended to bring out a few salient clinical features not often mentioned in the literature. The following observations are based on the clinical study of a series of 1,871 cases extending over a number of years.

The condition is known by various names: spring catarrh, phlycten pallida, conjunctivitis verrucosa, etc.—all pointing to its uncertain aetiology. Its seasonal occurrence during the summer months, the occasional eosinophilia and the presence of eosinophils in the conjunctival secretion in nearly all cases, the association with vasomotor rhinitis, hay-fever, and asthma, and the relief afforded in some cases by desensitization with pollen, etc., all indicate an allergic origin.

Distribution and Age Incidence

Like trachoma this is a disease of dirt and dust prevalent in tropical and sub-tropical regions. It is so common in West Pakistan, specially the Punjab, that about 31 per cent. of all ophthalmological cases seen during the summer months are affected by it, either directly or superimposed upon trachoma (Table I). It is also active in the winter months, about one per cent. of patients showing reversed seasonal variation, *i.e.* an active phase during the winter and a quiescent phase during the summer. In nearly all cases both eyes are affected.

TABLE I
INCIDENCE OF VERNAL CONJUNCTIVITIS

Year	No. of Eye Cases	Cases of Vernal Conjunctivitis	Percentage
1951	2,000	636	32
1952	1,840	595	33
1953	2,122	640	30

} average 31

The age incidence is shown in Table II (opposite). The commonest age is between 10 and 20 years; about 59 per cent. of cases are in this age group, and the disease is rare after the age of 40. Out of a total of 1,871 cases, 1,404 were males and 467 females.

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TABLE II
AGE INCIDENCE

Year	Cases of Vernal Conjunctivitis	Age Group (yrs)									
		5-10		11-20		21-30		31-40		over 40	
		No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
1951	636	117	18	375	59	98	17	38	5	8	1
1952	595	108	18	347	58	94	16	41	7	4	1
1953	640	114	18	377	59	90	14	52	8	7	1
Total	1,871	339	18	1,099	59	282	16	131	6	19	1

Clinical Features

The recognized clinical types of the disease are:

- (a) palpebral (pavement or cauliflower).
- (b) limbal (vesiculated or hypertrophic).

These need no further comment, except that in some cases both types occur together.

Another type, which has not been mentioned in the literature so far and which is very common in this part of the country, may be described as "irritative". Table III shows the distribution of this irritative type and the other two common types. The three types are fairly evenly distributed, more than one occurring simultaneously in about 10 per cent. of cases.

TABLE III
DISTRIBUTION BY TYPE

Year	Cases of Vernal Conjunctivitis	Irritative		Limbal		Palpebral		Mixed	
		No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
1951	636	199	31	176	29	191	30	70	10
1952	595	180	30	170	30	180	30	65	10
1953	640	200	31	177	28	192	30	71	11
Total	1,871	579	31	523	29	563	30	206	10

Irritative Conjunctivitis.—The chief symptoms are photophobia, itching, and epiphora. The eyes have a slightly angry look. The palpebral conjunctiva and the ocular conjunctiva covered by the lids remain healthy. Examination shows a slight peri-corneal flush which may be easily mistaken for the ciliary flush of an early uveal inflammation. Slit-lamp examination shows engorgement of the peri-corneal vessels including the deep ciliary plexus. Another striking feature is the marked increase in the number of aqueous veins. The disease may persist

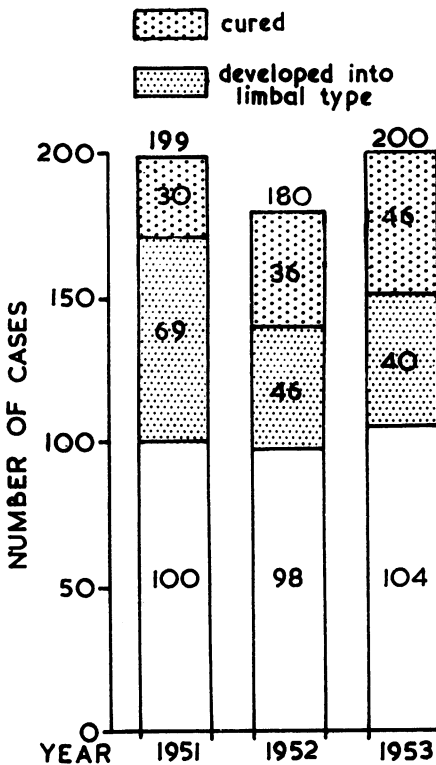


FIGURE.—Analysis of "irritative" cases of vernal conjunctivitis.

summer after summer without any hypertrophy, vegetation, ropy or lardaceous discharge, or milky appearance. Conjunctival scrapings invariably show 3 to 5 eosinophils per field by Leishman stain.

Associated allergies are frequently found elsewhere, the commonest being skin allergies, such as patches of discoid eczema, urticaria, contact dermatitis, or angioneurotic oedema. Other less common associated features are intestinal worm infestation (especially hookworm), hay-fever, and vasomotor rhinitis. Manifestations of vagotonic diathesis are also present in some cases.

This varied clinical picture may lead one to ask whether these are all expressions of the same disease; observation of cases year after year supports the idea that these are all manifestations of the same process, for in about 30 per cent. of cases the irritative type becomes limbal within 3 years (Figure). None developed into the palpebral type. Complete cure of the irritative type was effected in 30 per cent. of patients.

Summary

A new clinical "irritative" type of vernal conjunctivitis is described. It has been studied for a period of 3 years in 1,871 cases.

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REFERENCES

- DUKE-ELDER, S. (1938). "Text-book of Ophthalmology", vol. 2, p. 1697. Kimpton, London.
 GUTMANN, M. J. (1945). *Acta med. orient. (Tel-Aviv)*, 4, 150.