OCULAR SYMPTOMS IN GLANDULAR FEVER *

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OBSCURE though its ultimate cause may be, awareness of the widespread nature of the changes throughout the body prompts one to be on the lookout for unusual clinical signs in glandular fever.

There have been no reports of its ocular manifestations in Great Britain since hyperaemia of the discs was first described by Clemens (1907). The most authoritative and recent account is that of Tanner (1954), who divides the complications into two groups:

- (1) those affecting the neuro-ophthalmic apparatus of the central nervous system;
- (2) those involving the eye and its adnexa.

Group 1 is perhaps better known and includes extra-ocular muscle palsies, ptosis, nystagmus, disturbances of conjugate deviation, hemianopia, scotomata, hippus, papilloedema, and optic neuritis.

Group 2 includes swollen tear-glands, conjunctivitis, eyelid and peri-orbital oedema, episcleritis, uveitis, retinal haemorrhages, and oedema (local or general).

Episcleritis has only been noted once before (Zohman and Silverman, 1942). A further case is reported below, together with another presenting with subconjunctival haemorrhage, of which I have been able to find no previous example.

Case Reports

Case 1, a girl aged 11, was admitted to hospital on October 31, 1955, complaining of a sore throat for 5 wks, and swelling of the left eye for 18 hrs.

Examination.—Temperature 99.2°, pulse 132, respiration 24.

She looked ill and pale. A large subconjunctival haemorrhage was present in left eye, and a membrane was seen on the left tonsil and post-pharyngeal wall. Multiple neck glands and the spleen were palpable.

Laboratory Investigations.—White cell count 20,000, mononuclears 80 per cent. The result of the Paul Bunnell test was 1:1280 on admission and 1:160 after absorption.

Treatment.—Oxytetracycline 1 g. daily was given for 5 days.

Progress.—The throat cleared in 2 days and the subconjunctival haemorrhage in 10 days.

The patient was discharged as recovered on November 11, 1955.

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Case 2, a girl aged 9, was admitted to hospital on August 14, 1954, complaining of irritation of the eyes, sore throat, and dysphagia for 3 days.

Examination.—Temperature 102, pulse 98, respiration 34.

She looked thin and ill, there was marked conjunctival injection of both eyes and redness of the lids, the lips were dry and cracked, the tongue furred, and the hard and soft palates and cheeks covered with yellowish exudate. Small glands were palpable in the neck and axillae. The spleen was not palpable. The vulva was red and excoriated.

Laboratory Investigations.—Four days after admission the result of the Paul Bunnell test was 1:400 (unabsorbed), and a week later 1:128 (unabsorbed).

White cell count 7,000, polymorphs 50 per cent., lymphocytes 37 per cent., monocytes 10 per cent.

Conjunctival swabs showed no growth, but haemolytic streptococci were grown from nasal and vulval swabs.

Treatment.—Benzyl penicillin was given intramuscularly.

Progress.—A small, raised, red node developed lateral to the cornea of the left eye 5 days after admission, but all redness had disappeared in 14 days and she was discharged as recovered on August 31, 1956.

Discussion

Conjunctivitis is the commonest ocular complication of glandular fever varying up to 40 per cent. in recorded series of cases. It may manifest itself as simple suffusion (as in Case 2), as granular follicles, and as fiery redness with discrete punctate whitish follicles, or with membrane formation. It may precede or succeed the fever, is frequently unilateral, and oftener in the left eye (as in both the present cases). Bernstein and Wolff (1950), in a review of the literature, found that, of 34 cases reported with central nervous involvement, fifteen had ocular complications. Thomsen (1942) found an incidence of 9 per cent. in all cases, but 23 per cent. in central nervous system cases.

The pathogenesis of these ocular symptoms is as mysterious as that of others more usually associated with the disease. Their variety and nature have been compared to those of syphilis, but whereas disability due to the latter is measured in months or years, that due to the former is days or rarely weeks. Whether this is of significance is debatable.

The bleeding from various organs which has been described in glandular fever is of obscure origin. No obvious demonstrable deficiency of clotting or platelets is usual, and whether the capillaries are affected in some way is conjectural. It is therefore difficult to account for the subconjunctival haemorrhage in the first case. A minor blow or squeeze might conceivably have caused it, but no history of either could be obtained. Tuberculosis and syphilis are both known to affect the sclera and uveal tracts, the ultimate mechanism being disputed, although allergic vasculitis has been a popular theory. Whether the sclera behaves similarly in glandular fever remains to be proved.

Symptoms referable to the eyes are pain on rotation of the globes, deep orbital pain, photophobia, epiphora, and blurred vision. Whatever their cause, the course of these eye complications, as of others, is usually short in

glandular fever. There is no evidence of the tissue destruction or permanent loss of function which characterizes syphilis and tuberculosis.

There is, of course, no specific treatment. The antibiotic used in the first case did not seem to affect the course of the illness. Its use in the second was due to the presence of haemolytic streptococci, which were regarded as secondary invaders. It seems unlikely that they could have been a bacterial antigen, as in acute rheumatism.

The self-limiting nature of the disease makes any therapeutic appraisal difficult. Whether there is any place for the local or general use of cortisone, as in some other types of kerato-uveitis, is questionable.

Karpe and Wising (1948) sum the matter up as follows:

The unpredictable nature of the symptoms of infectious mononucleosis not seldom complicates the diagnosis of this condition, single symptoms so dominating the disease picture as to result in a wrong preliminary diagnosis.

This especially applies to the ocular complications. Once again, the performance of routine white cell counts, followed where necessary by a Paul Bunnell test, would seem to be the only way to detect these more obscure manifestations.

Summary

The knowledge available on the ocular and pulmonary complications of glandular fever is discussed, and two additional cases are reported.

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