MEMBRANOUS INFLAMMATION OF OROPHARYNX, NOSE, AND CONJUNCTIVA DUE TO SULPHATHIAZOLE ADMINISTRATION

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Sulphonamide therapy has resulted in a variety of toxic manifestations. Many reports of the effect of the drug on various systems of the body are to be found in recent medical literature. An unusual type of toxic reaction has come under our observation. It is the appearance, following sulphathiazole therapy, of a membranous inflammation involving the conjunctiva, mucosa of the nose, pharynx, mouth, and larynx. The membrane presented the same features wherever it appeared. Rapid recovery ensued on discontinuance of the chemotherapy.

Case Report

The patient was a white man aged 28, an officer in the United States Army Tank Corps. He was admitted to the hospital on Oct. 12, 1942. On Oct. 5 he developed an infection of the upper respiratory tract. Next day he reported to his unit medical officer, who found a rise in temperature to 102°. He was put in sick quarters and sulphathiazole therapy by mouth was instituted in a dosage of 1 g. every four hours, four times daily. The same day his temperature had risen to 104°. Defervescence and relief of symptoms followed. The drug was discontinued on the eve of Oct. 10, by which time he had received a total of approximately 18 g. of sulphathiazole. On the fifth day of chemotherapy, Oct. 10, the eyes became inflamed and a discharge was present. The following day, his mouth became very sore, was covered with a membrane, and the lips were cracking. On Oct. 12 there was a recurrence of fever and he was sent to hospital.

Physical examination on admission revealed a well-developed and well-nourished man, acutely ill, pale, dehydrated, dyspnoeic, and coughing. The pupils were contracted (morphine). The lids were swollen, the palpebral conjunctiva was markedly injected and covered with a smooth, thick, well-formed membrane of grey colour which left no bleeding surface when peeled off but re-formed within a few hours. The bulbar conjunctiva was injected peripherally and the membrane covered part of the outer canthus (Fig. 1). The cornea was not involved.

FIG. 1

Examination of the mouth revealed the same type of membrane in large patches covering the palate, fauces, floor of the mouth, gums, inside of cheeks, posterior pharynx, and larynx (indirect laryngoscopy); the nasal mucosa was involved in the same manner (Fig. 2). Ears were normal. There was no adenopathy. There was no foul odour. The mouth was very sore. Respirations were slow and not difficult. Dullness and decreased fremitus over the left lower lobe were present posteriorly. Coarse wheezing rales were heard bilaterally. The pulse was regular and of good quality. The blood pressure was 115/70. The abdomen was soft. There were no masses or tenderness, and the liver, kidney, and spleen were not palpable. Temperature was 103°, pulse 102, and respirations 26.

Smears and cultures from the lesions in the eyes, nose, and throat showed no diphtheria bacillus. The eye material revealed some staphylococci on culture, and the mouth lesions showed *Diplococcus catarrhalis*. The blood culture was negative. The

blood count was: erythrocytes, 4,470,000; leucocytes, 17,000 (polymorphonuclear leucocytes 77%, lymphocytes 18%, monocytes 2%, eosinophils 2%, and basophils 1%). The urine was normal. The sputum showed no pneumococci. The Wassermann test was negative.

FIG. 2

Clinical Course.—Sulphathiazole therapy was resumed on admission to the hospital in a dosage of 1 g. every four hours. The eyes were treated with sublimate 1 in 10,000 solution, irrigation and instillations of sulphacetamide 2.5% solution, and oily drops. The nose, mouth, and throat were irrigated with antiseptic solutions. The temperature was declining and the general condition was improving, but the eyes and oropharyngeal and nasal lesions were getting worse in spite of treatment. The membrane became more extensive and confluent. On Oct. 14 it was decided by Lt.-Col. Derrick T. Vail, M.C. A.U.S., Senior Consulting Ophthalmologist, that these unusual clinical features might be due to the chemotherapy, and accordingly the drug was ordered to be discontinued. The following day there was marked subjective improvement in the discomfort of the eyes and mouth, but no improvement objectively, though the lesions were not worse. On Oct. 17 the patient showed definite signs of improvement; the lesions began to clear rapidly and the membrane was sloughing in patches. On Oct. 19 the eye membrane was completely cleared up and there was only slight conjunctival injection. On Oct. 21 the eyes had completely recovered, but the mucosal lesions were still present in small patches here and there. The temperature had remained normal since Oct. 18 and the general condition was good. On Oct. 24 all the mucosa appeared healthy and the eyes were perfectly normal.

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CORONERS' DISTRICTS IN LONDON

The Public Control Committee of the London County Council is proposing to reconstitute coroners' districts in London, making four districts instead of five as at present. The number of inquests has decreased owing to the war conditions, especially evacuation, and it is considered that the work can now be adequately carried out by four coroners. The approaching retirement of a coroner gives a suitable opportunity for making the change. The proposed new districts will be northern, southern, eastern, and western; previously, instead of a southern district, there had been south-eastern and south-western. The four coroners to whom the districts will be assigned are, respectively, Mr. Bentley Purchase, Mr. Hervey Watt, Mr. W. R. H. Heddy, and Mr. Neville Stafford. The measure is a wartime one and will be reviewed after the war.