Annotation

Lymphogranuloma Inguinale

Lymphogranuloma inguinale or venereum, lymphopathia venerea, sixth venereal disease, poradenitis, Nicola-Favres disease or climatic bubo is caused by a virus. It occurs endemically in the tropics, is widespread in South America and amongst the negro population of the United States, is not uncommon in many parts of Europe, but is rare in the United Kingdom. It is a venereal infection, the portal of entry of the virus being on the genitalia, although extra-genital infection may occur.

The incubation period varies between three days and three weeks. The primary lesion then developing varies from an insignificant herpetic vesicle to an indurated ulcer or ulcers; in some cases, no history of primary lesion can be obtained, but a 'non-specific' urethritis may have brought the patient up for treatment. A regional oedema or lymphatic infiltration without visible portal of entry may also be the first sign of infection. These 'primary' lesions heal spontaneously in the course of a few weeks. From 10 to 21 days after the appearance of the primary lesion the inguinal glands become enlarged, more commonly on the one side only, become matted together, break down and lead to the formation of characteristic sinuses. This lymphadenitis may be accompanied by fever and malaise, and may interfere with the lymphatic drainage of the genitalia, resulting in elephantiasis. In the female this is known as 'esthiomene'; in the male it leads to gross oedema of the penis and scrotum with continual weeping of lymph. Both are likely to become secondarily infected.

Involvement of the rectum is not uncommon. In males, this is the result of homosexual practices. In females, it has been suggested that the infection spreads from the vagina by way of lymphatics; this may or may not be the case. The condition has been recognized for many years and was originally thought to be syphilitic in nature ('syphilome ano-rectal,' Fournier). Frei discovered the true aetiology.

Conjunctivitis, scleritis, meningo-encephalitis, various skin rashes and even Dupuytren's contracture of the palmar fascia have been attributed to the disease. With the development of methods of cultivating the virus, the truth or otherwise of these statements should be established. The virus has undoubtedly been recovered from the blood

and the cerebro-spinal fluid and can be grown on developing chick-embryo. It is morphologically similar to the psittacosis and the trachoma viruses, is found both intra- and extra-cellularly and varies in size from 0.2 to 0.4 microns.

Frei showed that sterilized pus from the bubo, injected intradermally, produces a reactive inflammation within 12 hours in infected cases, reaching its height in 72 hours. This is an allergic skin reaction and is known as the Frei test. It is definitely specific, but similar reactions may occur in the presence of other venereal infections. Infected mouse-brain can also be used as antigen, and is probably the most reliable agent for the test. The Frei test may remain positive long after the active inflammation has disappeared; whether this is due to a persistence of the virus remains to be seen.

There is also a complement-fixation test, using mouse-brain as antigen, which some authors claim to be more sensitive than the Frei test. More recently the intravenous injection of antigen has been used in diagnosis, a rise in temperature above 101° being considered a positive 'specific febrile reaction.'

Treatment of the acute infection is usually effected by the sulphonamides, sulphathiazole, sulphadiazine or, more recently, sulphatriad. A full course is given of 5 gm. daily for the first week, followed by 4 gm. daily for a further two weeks. Penicillin is said to be effective against the organism *in vitro*, but clinical reports have been somewhat equivocal. For resistant cases the organic antimonials are of value; preparations recommended are Fuadin and Anthiomaline (May and Baker), by intramuscular injection. Fever therapy is also useful either by means of the hypertherm or by intravenous vaccine therapy. Surgical excision of the involved inguinal glands is strongly contraindicated owing to the possibility of subsequent oedema of the leg. Late sequelae resulting from contraction of fibrous tissue, namely elephantiasis of the genitalia and, more commonly in this country, stricture of the rectum are in the domain of the surgeon. Plastic procedures may be necessary for the former, whilst regular dilatation of the rectum is usually adequate for the latter.

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