

Buruli (Mycobacterial) Ulceration in Uganda. (A New Focus of Buruli Ulcer in Madi District, Uganda.).

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Abstract : A form of skin ulceration, Buruli ulcer, has been described in Uganda which differs from the ordinary tropical ulcer in its clinical and histological appearances and its lack of response to antibiotics [this Bulletin, 1962, v. 59, 204]. A similar form of ulceration has been described in Australia, and a Mycobacterium (*M. ulcerans*) isolated. This, or a similar organism, has been found in Buruli ulcer in Uganda [ibid., 1963, v. 60, 375].

In 1962, a new focus of the disease was found in the Madi district, an area along the Nile in the north of the country bordering on the Sudan. A team from Makerere medical school visited the area in 1963 to study the condition.

39 new patients were seen. In 29 the lesions were active, in 10 healing or healed. The active ulcers demonstrated characteristic features: a necrotic base, undermined margins, location variable on trunk or limbs, an indolent course, and intractability to treatment. The patients did not exhibit lymphadenopathy, malaise or toxæmia. The ulcers healed with considerable tissue destruction and scarring. Histological appearances were also characteristic. There was a spreading necrosis of the subcutaneous fat, cell death antedating liquefaction and sloughing by several weeks. Microscopic calcium deposits occurred early. There was an absence of inflammatory response in the active phase. Acid-fast bacilli were found in the necrotic tissue of the base of the ulcer rather than in the margin. Spontaneous healing begins with an inflammatory response and later epithelialization occurs.

The results of treatment have improved, and quicker healing with fewer operations occurs when the standard surgical treatment of excision and skin grafting is supplemented by chemotherapy with antileprotic drugs such as dapsone, Ciba 1906, or Geigy B663 [ibid., 1964, v. 61, 608].

Epidemiological factors were investigated. The patients previously described came from the Buruli area, also on the banks of the Nile but further south. Both communities have fishing as a main occupation; the fish is generally dried or smoked. Possible biting insects involved were studied but there did not seem to be an excess of any species compared with areas where ulcer did not occur. Helminthic parasites were also studied but again there was no evidence to involve any of these. There has been a suggestion that the infection might be carried in by invading hookworm larvae, but no direct evidence for this hypothesis was found. All that could be concluded was that there was a definite association between Buruli ulcer and the River Nile.

There are excellent photographs of the ulcers and photomicrographs of the histological changes.

[See also ibid., 1965, v. 62, 1169.] A. C. E. Cole.

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