Buruli ulcer

In Buruli ulcer (*Mycobacterium ulcerans* infection), painless deep ulceration is seen on the leg. Arm ulcers are also occasionally observed. Huge ulcers larger than 15 centimeters may occur. The disease has been limited to certain areas of the world, in Sub-Saharan Africa and Australia. However, a few cases have been reported from Mexico and Japan. Transmission of the bacteria happens from the environment to humans. The possibility of the bite of an aquatic insect or the infection to open wounds has been proposed. Once in the skin, *M. ulcerans* grows and releases the toxin mycolactone, which blocks the normal function of cells, resulting in tissue death and immune suppression at the site of the ulcer. Microscopically, acid-fast bacilli are focally clustered in extensively necrotic lesions particularly in the subcutaneous tissue. *M. ulcerans* infection can cause Buruli ulcer-like lesions in some non-human animals. Buruli is the name of a regional area in Uganda.



Gross appearance of Buruli ulcer on the leg. Deep painless ulceration is seen. The figure was borrowed from Medicine:Burli ulcer – HandWiki.



Microscopic features of Buruli ulcer. Extensive necrosis is seen in the subcutaneous tissue. No granulomatous reaction is discernible. H&E-1



Microscopic features of Buruli ulcer. Extensive necrosis is seen in the subcutaneous tissue. No granulomatous reaction is discernible. H&E-2



Microscopic features of Buruli ulcer. Acid-fast bacilli are clustered in the necrotic lesion in the subcutaneous tissue. Ziehl-Nelsen-1



Microscopic features of Buruli ulcer. Acid-fast bacilli are clustered in the necrotic lesion in the subcutaneous tissue. Ziehl-Nelsen-2