Abstract

**Background:** Pyomyositis is a bacterial infection of the large skeletal muscles presenting with muscle pain and swelling. It is commonly seen in the tropics but is being recognised more in end-stage HIV/AIDS. In HIV-associated pyomyositis, leukocytosis and bacteraemia is rare due to deranged immune response. Surgical drainage, antibiotic treatment and HAART are the mainstay of treatment.

**Objective:** To describe pyomyositis in HIV positive patients, their CD4+ cell counts, clinical stages of pyomyositis and anatomical sites affected.

**Design:** Cross sectional, prospective, descriptive, consecutive entry study.

**Setting:** Kisumu District Hospital and Nairobi Rheumatology Clinic between January 2002 to December 2007.

**Subjects:** Twelve patients with HIV infection and pyomyositis.

**Main Outcome Measures:** CD4+ cell counts, clinical stage and site of pyomyositis.

**Results:** Twelve patients (six males and six females) were enrolled with mean age of 39.3 years (24-52). Pyomyositis was localised in the following regions: two each in gluteal and calf, six in the thigh and one each in the right arm and abdominal wall. CD4+ cell counts were low with a mean of 166.8 cells/µl (1.0-433) (normal range is 355-1600 cells/µl), indicating severe immunosuppression. They also had leucocytopenia with a mean white blood cell count of 3.67 × 10³/µl (1.5-7.1 × 10³/µl) with a mean neutrophil count of 62.7% (43-78). Random blood sugar and creatine kinase levels were all normal. The comorbidities comprised one case of deep venous thrombosis (DVT) and five of oral candidiasis. Pus swab grew *Staphylococcus aureus* in eight instances and *Streptococcus pyogenes* in four.

**Conclusion:** Pyomyositis in HIV positive patients tends to occur at low CD4+ cell counts. *Staphylococcus aureus* was the most common causative organism.