Abstract

Kenya is a country of marked environmental and ethnic diversity. A study of osteogenic sarcoma occurring in Kenya from 1968 to 1978 revealed 251 cases, representing between 89% and 100% of the predicted number. Variations in age, sex and anatomical location were within classical limits. However, the incidence of osteogenic sarcoma amongst the Central Bantu was significantly higher than predicted (P less than 0.0001), whilst the incidence among the Western Bantu was significantly lower (P less than 0.002), despite their similar ethnic origins. Two geographically dissimilar areas likewise exhibited significant differences in incidence. The Eastern province showed a higher incidence (P less than 0.002), whereas the Nyanza Province (P less than 0.001) and the adjacent Western Province (P less than 0.005) showed a lower than predicted incidence. These observations suggest that in Kenya a geomedical variable affects the incidence of osteogenic sarcoma and that genetic variation has no effect on incidence.