Burkitt’s lymphoma is one of the few lymphoreticular malignancies for which specific aetiologic hypotheses have been proposed. Furthermore there is general agreement that this tumour has certain cytologic and histologic features which distinguish it from the other lymphomas (Berard et al., 1969). It is the most frequently encountered childhood malignancy in tropical Africa and has an endemic pattern in countries such as Uganda (Burkitt and Davies, 1961) and New Guinea (Booth et al., 1967). This contrasts with the sporadic occurrence of this disorder in Canada, Great Britain, the United States and Brazil (Hoogstraten, 1965; Dorfman, 1965; Wright, 1966; Besuschio, 1974). In addition to these marked international variations in incidence, other differences have been observed. Cases reported in the United States have a median age of about 10 years (Cohen et al., 1969) and a relatively broad age range. In countries with an endemic pattern, the mean age is 8 years and the age range is considerably smaller (Burkitt and O’Conor, 1967). Interestingly, the age distribution among Africans from non-endemic areas closely approximates that found in America. In areas where this tumour occurs sporadically, there is a low incidence of jaw tumours and abdominal tumours dominate the clinical picture. Peripheral lymphadenopathy has been observed in approximately 30 per cent of American cases (Cohen et al., 1969). In endemic areas the majority of cases have maxillary or mandibular tumours at onset and peripheral lymphadenopathy is rarely present (Burkitt and O’Conor, 1961). These contrasting patterns are most intriguing in view of the histologic similarity of Burkitt’s tumour in endemic and non-endemic areas (Cohen et al., 1969).

Several additional features of this tumour are indicative of its unique character. Haddow (1963) showed that in Africa Burkitt’s lymphoma occurred with the greatest frequency in regions with a mean temperature of 60 °F or greater during the coolest month, and an average rainfall of not less than 20 inches a year. New Guinea has similar climatic features.
However on the Ivory Coast where this disease is endemic in sylvan zones and rare in the prairies, no significant differences were observed in rainfall or median or maximum temperatures (Loubiere, 1974). In both regions, however, marked differences in the curves of minimal temperature and relative humidity were found. Other observations suggest that the disease occurs frequently around lakes but not in mountain regions with altitudes above 5000 feet (Burkitt and Davies, 1961). None of the other lymphomas show the climatic dependence of the Burkitt tumour. Even within the Burkitt tumour belt in Africa (Figure 3.1), the incidence of this disorder is quite variable (Burkitt, 1967). Another important point is that this is not a tumour of African children but rather one of children in Africa; neither racial nor tribal characteristics appear to affect tumour incidence (Burkitt, 1963).