TB progression from bite wounds and seasonal distribution of bite cases

Pulmonary tuberculosis is likely to cause contamination of the mouth from coughed up lung discharges and bites from such animals may result in the injection of tubercle bacilli on the teeth into the subcutis, muscle or even into blood vessels. Since tuberculosis lesions in this species usually contain large numbers of bacilli (Gallagher and others 1976) bite wounds may present a heavy challenge resulting in a fulminating disease. In experimental animals infection by these aberrant routes has been shown to result in rapid generalisation and death after a short incubation period. Rabbits given 1 mg of culture of M bovis by the subcutaneous route died 40 to 80 days post infection and calves given 50 mg by this route died within a similar period. Infection of rabbits by the intravenous route with 1 mg of M bovis culture produced death in 15 days. In contrast direct respiratory infection results in a longer incubation (Francis 1958).

The higher incidence of tuberculosis in males (22 per cent) compared with females (17.3 per cent) is probably a reflection of the greater territorial aggression displayed by the male, together with the increased chance of contact with infected animals to which the male is exposed because of his wider ranging activity.

Records of all recent bite wounds found at autopsy were kept only during the three-year period 1975 to 1977 inclusive. Bite wounds, tuberculous or otherwise, were found in 6 per cent of badgers examined. As shown in Fig 6, a peak incidence occurred in March.

Reference