

A BANDICOOT FOUND INFECTED WITH STEFANSKY'S BACILLUS

BY JOHN LOWE, M.D.

*Officer-in-Charge, Leprosy Research Department
School of Tropical Medicine, Calcutta*

In 1937 some rats trapped in Calcutta were being examined in the All-India Institute of Hygiene, in that city, and I took the opportunity of having them examined for rat leprosy. A few infected rats were detected.

In the rat traps a few other animals were caught, including some bandicoots (*Bandicoota indica*).¹ One of these animals had slightly enlarged inguinal glands, and smears from them showed acid-fast bacilli. The glands were excised and emulsified in saline, and the emulsion was injected into a series of rats. All of them developed generalized rat leprosy, which is now in its third passage. The bacillus is morphologically identical with Stefansky's bacillus and is pathogenic to rats. It therefore appears to be the bacillus of Stefansky.

It appears that many rodents are susceptible to Stefansky's bacillus, and may be found naturally infected. The bandicoot belongs to this order of animals but it differs markedly from the more common rodents in appearance and habits. Rat leprosy has now been found in nature in *Rattus norvegicus*, *R. rattus*, *R. rattus alexandrinus*, *R. rattus diardii*, *R. concolor*, *Pachyura murina*, and *Bandicoota indica*. Mice and hamsters are also susceptible to the infection, but have not been found naturally infected.

¹ Bandicoot: (Telugu *pandi-kokku*, pig-rat.) (a) A very large rat (*Nesokia bandicota*), of India and Ceylon. It does much injury to rice fields and gardens.—*Webster's New International Dictionary*.

The Bandicoot Rat (or Malabar rat, or pig-rat), which inhabits many parts of India and is plentiful in Ceylon, is the largest known species of rat. It attains the weight of two or three pounds, and is 24 to 30 inches long, including the tail, which at the base is 2½ inches in circumference. The body is thick and arched, black above and grayish below. It feeds on grain and roots.—*New Standard Encyclopedia*.