EFFECTS OF A BITE FROM A
BARKING SPIDER (Selenocosmia stirlingi) Hoog

Geoffrey Robinson* and Graham Griffin**

The paucity of information concerning manifestations of spider invenomation in humans can often hinder the application of appropriate medical treatment. This situation is particularly serious in sparsely settled regions where access to assistance can often be delayed by travel time to medical centres.

In central Australia there are few species of spider capable of inflicting serious and prolonged discomfort in humans. Of these the Redback Spider, Latrodectus hasselti, Mouse Spider Missuleana sp. and the Bird or Barking Spider, Selenocosmia stirlingi are considered the most dangerous.

Effects of a bite
The following describes the clinical manifestations exhibited by a 35-year-old woman thought to have been bitten by a spider and admitted to Alice Springs Hospital four days after the bite. The bite was inflicted on the thigh while the woman was asleep. A spider was recovered from the bed clothes the next morning and was subsequently identified as a mature male Barking Spider.

The woman initially felt an itch at the bite location. Next morning the bitten area began to sting and appeared as a pink circular area about 3 cm in diameter, with two puncture marks approximately 1 cm apart within it. Over the next two hours the bite caused intense discomfort, similar to a 'wasp sting', and the area of redness increased.

Antihistamines, aspirin and codeine were taken to alleviate the pain, however the inflamed area surrounding the bite continued to increase. By nightfall the area was circular in shape, about 6 cm in diameter, red and felt 'very hot and burning'. The woman experienced nausea but no vomiting and developed a 'splitting headache behind the eyes', which was exacerbated by light. During the next three nights she also had frequency and dysuria.

The nausea and headache continued less intensely into the third day and the erythematous area was fading, but in the evening the headache became very severe, aggravated by the slightest light. The woman had a rigor, felt very nauseated and vomited. The bitten area again became hot, red and 'angry looking'. It became slightly vesiculated on the margins, and began to spread rapidly and irregularly over the thigh. By the morning of the fourth day the plague-like lesion covered almost two-thirds of the thigh surface area. She was admitted to hospital on the fourth day without any systemic symptoms or fever, and was not distressed. The lesion was tender but not hot. The following observations were made:
— Regional lymph nodes not enlarged or tender;
— Urine contained no protein;
— Erythrocyte Sedimentation Rate was 60 mm/h;
— Blood count and film, serum electrolytes, serum urea and creatinine, liver function tests, microscopic examination of urine and fibrinogen degradation products in the blood were all within normal limits;
— No growth on culture of the urine.

The patient remained symptom-free over the next four days and the skin lesion gradually faded.

The spider

The Barking Spider is a terrestial burrower common in inland Australia. Its body (head and thorax) measure about 4.5 cm in mature specimens. In central Australia the spider is most active during, and for several days following, summer rains. Males of the species are most commonly encountered since they vacate their burrows during humid weather in search of the more sedentary females. The males do not return to their burrows but remain as vagrants until death. It is during this period they are most likely to come into direct contact with people.

Southcott (1978) reports that bites from species of Selenocosmia can sometimes cause 'severe reactions'. A bite from a closely related larger species (S. crassipes) near Darwin, was reported to have killed a 4.5 kg dog within two and a half hours (C. S. Li, pers comm).

Reference

SOUTHCOTT, R. V. (1978) Australian harmful Arachnids and their allies. R. V. Southcott, 2 Taylors Road, Mitcham, South Australia 5062.

* Alice Springs Hospital, Alice Springs, N.T. 5750.
** C.S.I.R.O. Central Australian Laboratory, Alice Springs, N.T. 5750.