

AN AUTHENTICATED CASE OF BLACK WIDOW BITE

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In recent years there have been several reported instances in the Victoria area of humans being bitten by Black Widow spiders but in each case, except one, the causative agent was not positively identified. In fact in one instance the victim could not be sure that it was a spider that inflicted the wound and on another occasion it was fairly definitely determined later that the patient received nothing more than a prick from a raspberry cane!

The one known exception involved an eight-year-old boy whose case received some newspaper publicity in April 1950. The spider was apparently identified as a Black Widow but no record of the case has been published.

Another authenticated case of a Black Widow spider bite occurred in Victoria in 1958. The spider was seen immediately following the attack and it was subsequently captured thus permitting positive identification. The victim was a 16-year-old girl admitted to the Royal Jubilee Hospital Emergency Department at 4:15 a.m. on September 9, 1958, suffering with severe abdominal pain. The following is a copy of the case history:

"She had retired on the previous evening feeling well and had wakened at around 3:30 a.m. because of the sensation of a sharp needle-like pain in her right outer lower leg just above the ankle. Pulling her bed covers aside she saw a black spider scurry away. This pain passed off, but was replaced in about fifteen minutes by a severe aching pain in the right groin. This continued, but in turn was replaced in about ten minutes by excruciating generalized abdominal pain of a cramping nature and she was rushed to hospital.

Physical Examination

When seen shortly after her arrival she appeared apprehensive. Her face

was slightly flushed and she was perspiring. She was restless, moving about the stretcher and almost in tears with pain in the abdomen. There was no pain in her leg or groin.

Pulse 90, regular. Blood pressure 140/70. Heart sounds were normal.

The abdomen showed a board-like rigidity. There was muscular but not deep tenderness so that it was apparent that the pain was arising from the abdominal wall rather than from the peritoneal cavity. No abnormality was seen or palpated in the right groin. The right leg showed a small red mark on its lower outer aspect. This could easily have been missed if the girl had not indicated its site. There was no redness or induration at all surrounding the small central red area. The reaction was not even that seen with a mosquito bite.

Treatment and Progress

It was apparent that her symptoms were due to the bite of a black widow spider. She was given intravenously 10 cc of 10% calcium gluconate a few minutes after her arrival. An ice bag was placed over the site of her bite and a hot water bottle to her abdomen. This resulted in a considerable decrease in her abdominal discomfort and she quietened down considerably but a half hour later it was necessary to give her 1/6 gr. of Morphine subcutaneously and a repeat injection of 10 cc of 10% calcium gluconate intravenously. This resulted in considerable relief of her distress. She was given 1,500 units tetanus antitoxin and antihistamine was commenced (Chlortripolon 4 mg. q.6.h.). During the first 24 hours she was quite miserable with profuse perspiration and the abdominal discomfort was replaced ten hours after admission by an aching in the transverse arches of her feet. She developed no fever and her blood pressure stayed stable. Her

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pulse ranged from 90 to 110. She did not void during the first 24 hours and during this period of time it was necessary to give her one further injection of 10 cc of 10% calcium gluconate and three further injections of Morphine gr. 1/6 and two aspirin and Codeine (gr. 1/2) capsules.

Between the 24th and 48th hour after admission her condition improved. She voided freely. A general urinalysis was negative. The abdominal pain disappeared, but the ache in the feet remained, and the soles of her feet were quite sensitive.

Hyperreflexia was noted at this time and she continued to have a moderate degree of perspiration with chilly sensations but no fever.

On the third hospital day her symptoms disappeared. On the fourth day she was discharged asymptomatic. Examination at this time revealed a soft abdominal wall and normal tendon reflexes.

Final Diagnosis

Black Widow Spider Bite (Arachnoidism).

The Black Widow spider is found in the dry regions of the Province usually in rubble heaps or under rocks. It is locally common in the Okanagan Valley and extends its range west at least as far as Princeton. Some years ago it was abundant in the vicinity of Trail (see *The Black Widow Spider* by K. Raht, Rept. Prov. Mus. for 1943, p. 13 and also Publication No. 127, by Fergus J. O'Rourke, Canada Department of Agriculture, Science Service, 1953). On Vancouver Island it is relatively common in the Victoria area and is found along the east coast as far as Nanaimo. On the mainland it has been collected at Powell River which seems to be an unusually wet place for this species.

In the southern United States this spider is said to be much more venomous yet fatal cases affecting man are rare.

ACHAETONEURA DATANARUM REARED FROM ANTHERAEA POLYPHEMUS IN BRITISH COLUMBIA (Diptera: Tachinidae)

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A larva of *Antheraea polyphemus* (Cramer) was observed feeding on *Betula occidentalis* at Vernon, B.C., in July, 1945; it spun its cocoon in mid-August. The cocoon was brought indoors on January 30, 1946, and placed in an incubator next day (72° F., 90% relative humidity). On February 19, sixteen dipterous larvae emerged from it and formed puparia. From March 4 to 7, seven male and nine female flies were recovered. They have been identified by Mr. A. R. Brooks as *Achaetoneura datanarum* (Townsend, 1892), a somewhat

uncommon species.

A second cocoon, from Trinity Valley, B.C., was incubated from March 12 to April 8 inclusive. Fifteen dipterous larvae left it on April 3 and formed puparia. On April 20-22, eight males and six females of *A. datanarum* emerged (det. Brooks); one additional specimen was accidentally destroyed before sexing.

Both cocoons were rested on a support which was at a 45° angle in the rearing jar. In each case the fly maggots emerged from the valvular end, though in one instance this end was upward.