

## HEALTH/FITNESS

# Physician Pulls Stun Gun to Treat Spider Bites

By David Blum  
World Staff Writer

An Ada doctor is successfully treating poisonous spider bites with shocks from a stun gun, a state medical journal reports.

Dr. Carl D. Osborn says the unconventional treatment neutralizes the venom before it can destroy tissue and cause scarring.

"The treatment is briefly uncomfortable, but the results are worth the discomfort," Osborn said. "It is a very, very effective treatment."

Between Sept. 7, 1988, and Jan. 15, 1991, Osborn treated 147 confirmed or suspected cases of spider bite with high-voltage direct-current shocks from a hand-held stun gun.

Osborn outlined his procedure

in the June edition of the Journal of the Oklahoma State Medical Association.

Tissue damage caused by the venom is stopped at the time of the treatment, and pain and other symptoms usually are improved within 15 minutes, the article states.

Untreated, a poisonous spider bite will darken and blister, Osborn said.

In the following weeks or months, the tissue dies, rots and sloughs off, leaving a scar that can be at least 1/2-inch deep.

Many spider bite victims require skin grafts to cover scarred tissue, Osborn said.

"You may have to graft three or four times before it takes," he said. "It can be a very expensive procedure."

Although others disagree, Osborn believes that standard treatments, which involve the injection of medication into a bite, spread the venom and increase tissue loss and scarring.

The shock treatment neutralizes the venom before it can damage tissue, he said.

The unproven theory as to why the treatment works is that metallic components in venom are altered when blasted with high current, Osborn said.

"My experience is the venom action is stopped at the time of the first shock," he said. "The direct current changes the structure of the venom."

Osborn said he first heard of the effects of electrical current on venomous bites from a 1988 article in an outdoorsman's magazine.

The article described an explorer in Ecuador who neutralized a poisonous snake bite with a stun gun.

Shortly thereafter, Osborn said, his 10-year-old granddaughter was bitten on the shoulder by a brown recluse spider.

He administered a stun gun treatment, and the hardened tissue began softening within 45 minutes, Osborn said.

"By the second morning, you couldn't see (the bite)," he said. "That is a far different course than what you would expect."

The brown recluse, also called the fiddleback, and black widows are the two varieties of spiders in Oklahoma venomous enough to cause significant problems, according to the Oklahoma Poison Control Information Center.

Osborn began using the shock procedure and recording the results, which he compiled for the medical journal.

He said the technique was especially useful because it is not necessary to know the type of spider responsible for the bite.

"It has worked on all spider bites so far," he said.

Since beginning the study, Osborn said, he has treated more than 200 spider bite patients with the stun gun.

To treat a bite, he attaches an extension wire to one terminal on the stun gun.

That wire is placed on the skin on the opposite side of the arm or leg where the bite is located.

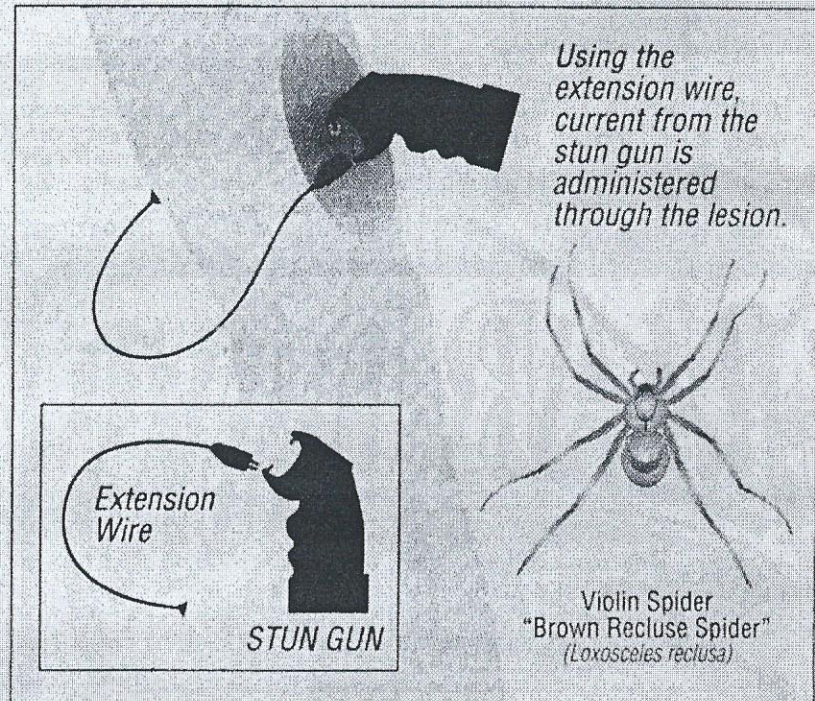
The other terminal is placed directly on the lesion, coursing the jolt through the bite area.

Next, shocks are administered across the bite in a spoke pattern to cover any areas in which the venom may still be active, Osborn said.

Osborn also administers antibiotics and tetanus boosters when required.

His article recommends against surgically removing le-

## Treatment of Spider Bites By High Voltage Direct Current



Using the extension wire, current from the stun gun is administered through the lesion.

Violin Spider  
"Brown Recluse Spider"  
(*Loxosceles reclusa*)

SOURCE: Journal of the Oklahoma State Medical Association

DCarman / Tulsa World

sions or injecting medication, which are current standard procedures.

Osborn stresses that only DC, or direct current, from a stun gun powered by a nine-volt battery be used.

Since he began the study, Osborn said, spider bite patients from across Oklahoma have been referred to him.

He said the treatment is effec-

tive as long as active venom is still in the wound.

"It's never too late to do it," he said.

Patients in the study were treated as late as five weeks after being bitten.

Osborn said he also has used the stun gun to neutralize the effects of venom in bee and wasp stings, and scorpion, snake and tick bites.