

## Stingray Envenomation - A Suggested New Treatment

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Stingray envenomation may cause both death and serious morbidity.<sup>1</sup> Prolonged infection, or delayed healing may cause deformity, inconvenience and financial difficulty for victims, with medical bills and time off work.

The previously-suggested treatment for stingray envenomation was excision if necessary, flushing the wound with betadine, and leaving it open to heal by primary intention, helping prevent commonly-associated infection.<sup>1</sup> In 1989 the author treated a stingray envenomation on a victim's lower limb this way, with excision of the wounded area 10mm round and 20mm deep. This was flushed with betadine and packed with antibiotic-infiltrated paraffin gauze. This dressing had to be changed every 3 days by soaking, but fresh bleeding and damage to healing tissues occurred. Doxycycline 100mg daily was prescribed.<sup>1</sup> The wound took three to four weeks before healing sufficiently to enable the victim's return into seawater as a net fisherman.

In April 1995 the same victim suffered a similar stingray envenomation to the lower limb. An area 10 mm round and 10 mm deep was excised and the crater packed with a alginate-based wick (kaltostat), these dressings suggested as useful in toxin absorption<sup>2</sup> and easily removed without pain or damage to the healing wound.<sup>3</sup> Ciprofloxacin 500mg bd was prescribed.

The alginate dressing fell from the wound at 6 days as the outer dressing was changed. The wound was clean and healing well. A transparent, waterproof dressing was applied over a thin layer of kaltostat to enable his early return to standing in seawater. Fourteen days after envenomation the wound was fully healed and no further problems were experienced. With return to work less than half his previous injury, the victim was impressed with the treatment.

I suggest this method be further evaluated and tried in other fish puncture wounds and wounds from fish hooks, sea shell or rock lacerations. Tetanus prophylaxis<sup>1</sup> and antibiotic cover with doxycycline 100mg daily (or ciprofloxacin 500mg bd) is advisable as bacteria present in seawater (vibrios, aeromonads or *Mycobacterium*) are often resistant to commonly used antibiotics.<sup>4 5</sup> Specifying seawater involvement for specimens sent for microbiology is essential as the growth medium must include 7.5% sodium chloride solution to allow these organisms to be grown - this is also sufficient to inhibit the growth of most other bacteria.<sup>5</sup>

Yours faithfully,

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## REFERENCES

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