

## **MONONEURITIS MULTIPLEX FOLLOWING COELENTERATE ENVENOMATION**

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Mononeuritis (mononeuropathy) multiplex is a form of peripheral nerve inflammatory dysfunction involving several individual nerves, sometimes in unrelated portions of the body. It may result from mechanical (including trauma, ischaemia and infiltration's), toxic, metabolic or allergic causes. Numerous infections may produce this pathology through disorders of cell mediated immunity. Direct peripheral nerve loss can be induced by lipolytic or proteolytic proteins and enzymes, and local soft tissue oedema can impinge upon peripheral nerves to produce function disturbance. Both motor and sensory symptoms are usually present.

While peripheral, autonomic and central neurological consequences (either primary or secondary) of jellyfish envenomation are recorded and the neurotoxic properties particularly of sea anemone toxins have long been appreciated, two documentation's of Mononeuritis multiplex following coelenterate stings have appeared. One such case was a 25 year old male stung by a jellyfish off the coast of Norfolk, Virginia, USA. Although the coelenterate was not identified, both Physalia and Cyanea species were present in the water at the time of injury. This patient noticed typical erythematous wheals at the site of tentacle contact. The lesions were accompanied by slight constitutional symptoms and disappeared within a day. During the subsequent week he noticed gradual weakness in his right hand and 7 days later had diffuse weakness on the contralateral hand and arm. This delayed neuropathy of the radial, ulna and axillary nerves improved spontaneously within 10 weeks.

In a second case a 52 year old female contacted a sea anemone in southern Florida producing a superficial scratch on the right wrist which burned for 2 to 3 days. A week later after the discomfort disappeared, right shoulder weakness and aching was noted. Winging of the right scapula was detected one month after injury at which time electromyography demonstrated delayed latency of the right long thoracic nerve. This patient's symptoms disappeared spontaneously over a period of 8 months. Convalescent sera was found to be positive by ELISA for immune specific antibody IgG against Millepora but subsequent investigations revealed a higher titre against Condylactis antigens.

Both of these patients then had peripheral nerve deficits (motor and sensory) occurring several days after coelenterate envenomation which affected nerves remote from the envenomation site, were not associated with arterial compromise and which resolved spontaneously over ensuing months.

We report two further cases of Mononeuritis multiplex occurring following coelenterate stings, one from the sting of a corallimorpharian anemone in Papua New Guinea (Figures 1a, 1b & 1c), and one from an unidentified jellyfish sting in Penang, Malaysia.