

CASE STUDY

Transected Nerve

Mr. Jones is a 60-year old dockworker who sustains a serious fall badly lacerating his forearm. There is severe weakness in intrinsic hand muscles. He is sent to see Dr. X, a poorly trained electromyographer. Dr. X has an excellent reputation in the community. He is great friends with a number of local orthopedists and often takes them to his club and out on his boat.

Dr. X performs EMG and nerve conduction studies three days following the accident. He states that the nerve conductions are all normal though he does not appreciate any motor units under voluntary control in ulnar hand muscles. He tells the referring doctor that he doubts that the nerve is transected.

The patient undergoes physical therapy. No response is seen in several months of treatment. On his own, the patient obtains a second opinion and sees Dr. Y, a who has special training in EMG. Repeat EMG and nerve conduction studies reveal no evidence of ulnar function.

This patient underwent an attempt at surgical reattachment of the nerve at nine months following the injury. Because of the delay in diagnosing, a poor surgical result was seen. If the EMG had been appropriately performed at three weeks after the injury leading to surgical repair at four weeks, full functional recovery would have been seen.

