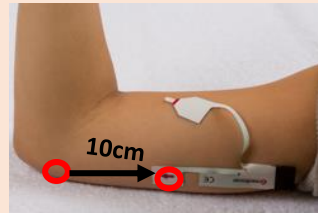


# QUICK GUIDE/Mixed Latency Comparison for UNE

Ulnar nerve entrapment in the elbow (mixed nerve conduction study) • Median-ulnar peak latency comparison method



1. Measure 10 cm from the medial epicondyle of the humerus to the area between the biceps and the triceps



2. Attach the red arrow of the recording electrode onto that position, with the arrow points towards the elbow. Attach the ground portion of the electrode to the muscle.



3. Connect the cable with the electrode and turn it over on the electrode



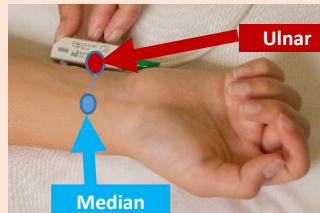
4. Wrap the stretch band tightly over the electrode and around the arm.



5. Moisten the metal studs of the stimulation electrode, raise the stimulation level and locate the median nerve



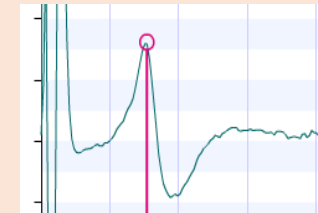
6. Increase the stimulus and once the thumb shows motor movement check the screen for a clear peak to start the test. If no peak is shown, check the electrode positioning



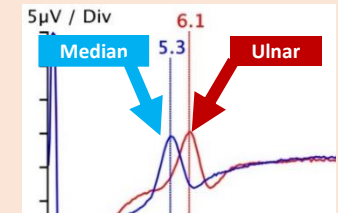
7. When testing the ulnar nerve, check that the distance is the same as with the median nerve. Moisten the metal studs and locate ulnar nerve



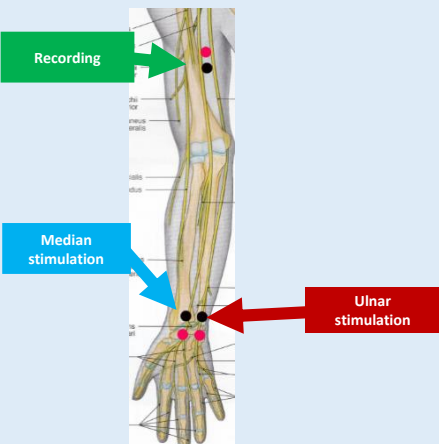
8. Increase the stimulus and once the whole hand shows motor movement check the screen for a clear peak to start the test



9. Modify the test results (peak latencies, if necessary)



10. The difference between the peak latency times is calculated. The result is considered abnormal if the difference is more than 1.2 milliseconds



## Mixed nerve peak latency comparison method

Both median and ulnar mixed nerves are studied to examine the difference in peak latencies. The test result is considered abnormal if the time difference is more than 1.2 ms. The method is effective in early detection of the ulnar nerve entrapment.

### Note

- ❖ If the median test show no peak, check the positioning of the recording electrode
- ❖ In order to get a sufficient signal the recording electrode must be tightened firmly with the stretch band.
- ❖ Use the black recording electrode with the green stimulation electrode.

## Height adjustment

$$\text{Ulnar} - \text{Median} - \text{Height} \times 0,015 + 2,67$$

Example with a patient of 180cm of height

$$6,1 - 5,3 = 0,8 \text{ ms} \quad 0,015 * 180 = 2,7$$

$$0,8 - 2,7 + 2,67 = 0,77$$

The peak latency difference after adjustment 0.77 ms