

# SUMMARY

---

## **SUMMARY**

The anatomical sites of radial nerve compression were studied by dissecting thirty upper limbs (from fifteen, human cadavers from the Anatomy Department in Benha Faculty of Medicine). This study revealed that the radial nerve and its terminal branches were crossed by many elements which were categorized into four groups according to their sites from above downwards:

**The first and second groups** include the elements crossing the radial nerve in front of the lower part of the lateral intermuscular septum and in the radial tunnel :

The nerve was crossed by branches from the radial collateral artery in 13.33% of specimens and also crossed by a muscular vessels extending between brachialis and brachioradialis in 3.33% of the specimens, crossed by brachialis in 20% of the specimens, crossed by a group of muscle bundles extending between brachialis and brachio-radialis in 20% of the specimens, and also crossed by a fibrous band extending between the previous two muscles in 23.33% of the specimens.

So, in front of the lateral intermuscular septum and in the radial tunnel the radial nerve was crossed by vessels, muscle bundles and fibrous bands in 80% of the studied specimens.

**The third group** include the elements crossing the superficial and deep terminal branches of the radial nerve in the cubital fossa :

The two terminal branches of the radial nerve were crossed by muscular branches from common interosseous artery in 3.33% of the

specimens, also, they were crossed by muscular branches from the beginning of the radial artery in 3.33% of the specimens.

So, in the cubital fossa, the two terminal branches of the radial nerve were crossed by arteries in 6.66% of the specimens.

In the **Fourth group** the deep terminal branch of the radial nerve was crossed by the arcade of Frohse in 40% of specimens.

It was concluded that, in the course of the radial nerve in the lower part of the arm and forearm, the most common site liable for compression is the radial tunnel.