

## **Abstract**

### **BACKGROUND:**

Variations in the branching of posterior cord are important during surgical approaches to the axilla and upper arm, administration of anesthetic blocks, interpreting effects of nervous compressions and in repair of plexus injuries. The patterns of branching show population differences. Data from the African population is scarce.

### **OBJECTIVE:**

To describe the branching pattern of the posterior cord in a Kenyan population.

### **MATERIALS AND METHODS:**

Seventy-five brachial plexuses from 68 formalin fixed cadavers were explored by gross dissection. Origin and order of branching of the posterior cord was recorded. Representative photographs were then taken using a digital camera (Sony Cybershot R, W200, 7.2 Megapixels).

### **RESULTS:**

Only 8 out of 75 (10.7%) posterior cords showed the classical branching pattern. Forty three (57.3%) lower subscapular, 8(10.3%) thoracodorsal and 8(10.3%) upper subscapular nerves came from the axillary nerve instead of directly from posterior cord. A new finding was that in 4(5.3%) and in 3(4%) the medial cutaneous nerves of the arm and forearm respectively originated from the posterior cord in contrast to their usual origin from the medial cord.

### **CONCLUSIONS:**

Majority of posterior cords in studied population display a wide range of variations. Anesthesiologists administering local anesthetic blocks, clinicians interpreting effects of nerve injuries of the upper limb and surgeons operating in the axilla should be aware of these patterns to avoid inadvertent injury. A wider study of the branching pattern of infraclavicular brachial plexus is recommended.