Unusual But Dangerous Neurovascular Complications of the Floating Shoulder

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Purpose: Our objective was to highlight the possible and fearsome complications of the "floating shoulder."

Methods: The case of a patient is described who, following a fall on a bicycle, suffered a fracture of the clavicle and of the glenoid neck of the scapula with subsequent nervous deficit of the upper limb and widespread swelling.

Results: The "floating shoulder" is the condition of an ipsilateral fracture involving the midshaft of the clavicle and the glenoid neck of the scapula. These fractures can be easily diagnosed with routine shoulder views (AP) of the shoulder. These injuries are often results of high-energy trauma of the shoulder and they are commonly associated with catastrophic neurovascular complications. In this case the fracture of clavicle caused an expanding hematoma at the site of injury, a subclavian pseudoaneurism, basilic and cephalic vein thrombosis up to the forearm, and a deficit of brachial plexus. The formation of an expanding hematoma or a pseudoaneurism of upper limb artery in the axillary region (close to neural structures) can lead to compression of nerves and scarring of surrounding tissues with adhesions formations, compressing elements of the brachial plexus. Vasa nervorum may be injured and this can cause peripheral nerve ischemia with impairment of their function, and they may become more susceptible to compression.

Conclusion: This study confirms that it is essential to recognize as soon as possible this kind of shoulder trauma, in order to prevent or treat in time any type of neurovascular complication.