

Atlantoaxial Rotatory Subluxation in Children - A Case Report

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ABSTRACT

Atlantoaxial rotatory subluxation should always be considered in children presented with torticollis after a traumatic event. A proper plain cervical radiograph is usually difficult to obtain, especially with children. Therefore, Computed Tomography (CT) scan is still the gold standard by which to diagnose this condition. We report a case of atlantoaxial rotatory subluxation in children which includes the patient's history, clinical features, diagnostic images, management, as well as literature review.

The Controversial Role of CT Angiogram in Paediatric Supracondylar Humeral Fracture with Pulseless, Perfused Limb

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ABSTRACT

Introduction: Almost 20% of displaced supracondylar humerus fractures in children are complicated by vascular compromise. At present, there is no clear consensus on the management of a persistent pulseless but well-perfused hand after a satisfactory closed reduction of the fracture. The role of angiography in such cases has been a source of controversy and debate. **Case Report:** An 18-month-old girl was referred to us with a closed, displaced, supracondylar fracture in her left humerus after a fall. She had an impalpable radial pulse but her hand looked pink with a capillary refilling time of less than 2 seconds. She underwent an emergency closed reduction and percutaneous pinning. Post-reduction, her hand remained persistently pulseless but well-perfused. A multi-disciplinary decision was made more than 24 hours after the initial surgery. The medical team decided to proceed with a computerized tomographic (CT) angiogram followed by surgical exploration and release of her left brachial artery, which was completely occluded by compression of the surrounding soft tissues. The procedure proceeded smoothly and the patient showed remarkable immediate and long term outcomes. There was no further complications observed as a result of the delay in surgical treatment. **Discussion/ Conclusion:** We believe that the decision to manage such cases should be made on based on appropriacy in each case. A CT angiogram is helpful in objectively determining the level of occlusion and the possible risk of proximal migration of thrombus which may eventually affect the available collaterals. A well-perfused limb may allow adequate time for a proper decision to be made for surgical intervention.