Management Of Lateral Humeral Condyle Fractures In Paediatric Patients

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The distal humeral physeal fracture is the second most common physeal fracture after the distal radius. However, this is a fairly rare injury. It is often missed as the clinical deformity is not apparent and the radiological features are difficult to identify. These fractures are often isolated but are occasionally associated with elbow dislocations, proximal ulnar fractures and radial head fractures. Primary nerve injury is rare however. The Weiss classification has replaced the more traditional Milch classification as it has better predictive value of future complications. Many controversies lie in the management of these fractures. Open reduction and internal fixation is generally favoured. Immobilisation is maintained for 6 weeks post operatively. A second surgery is then needed for the removal of the fixation device. However, there are many proponents for a less aggressive approach with closed reduction and percutaneous pinning, achieving similar long term results. Among the variations to the fracture fixation techniques in the acute phase are wires versus screws and buried versus exposed wires. These fractures are also fraught with complications of delayed union, malunion, non-union, cubitus varus, progressive cubitus valgus deformities with tardy ulnar nerve palsy and osteonecrosis of the condylar fragment. The late management of these fractures are difficult and the complications are even harder to manage. Treatment range from observation to staged reconstructive surgery. In conclusion, it is pertinent that a lateral condyle fracture not be missed, and important that it be adequately treated as these lead to uniformly good results. However failure to do so leaves us with the complications which are difficult to treat and ultimately lead to poor results.