"Interest of fibula allograft in the management of 4-parts proximal humerus fracture?"

Levy, G.; Putineanu, Dan Constantin; Tribak, Karim; Cornu, Olivier

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16.50 IL Treating humeral fractures. Current strategies
Verbruggen J.
Department of Surgery, division of Trauma surgery, Maastricht University Medical Center, Maastricht, The Netherlands

17.02 Proximal humerus fracture treated with transdeltoid lateral (MIPO) approach
Baltov A., Enchev D., Rashkov M.
Department of Orthopedics and Trauma Surgery, University Emergency Hospital “Pirogov”, Sofia, Bulgaria

Objectives: The locking plating of proximal humerus treated by DP approach leads many complications. Material and method: For a period of 3 years, 90 patients at the average age of 71/26 – 90/. Fracture spread was as follows: 25(28%) 3-part and 22(23%) 4-part varus dislocated; 22(23%) 3-part and 23(25%) 4-part valgus impacted. We applied PHVariax locking plates. The mean operative time was 55 min, X-ray exposure 2 min and blood loss 200 ml. In 32(36%) patients ABG was used. Results: The observed complications were: varus deformation 5(6%); impingement 14(15%); AVN 3(4%); screws cut-aut 5(6%); fixation failure 2(3%); no injury n. axillaris. An additional operative procedure 24(27%) and the CS was 81. FU mean 12 months. Conclusion: MIPO decreasing the mean operative time and the blood loss and preserved soft tissue and humeral head nutrition. The disadvantages of the method are the X-ray explosion, danger of neurological injury (n. axillaris) and impingement of the shoulder. The rang of complications was may be lower that DP approach.

17.12 Interest of fibula allograft in the management of 4-parts proximal humerus fracture?
Levy G., Putineau D., Tribak K., Cornu O.
Orthopaedic and Trauma department, University Hospital St-Luc, Université Catholique de Louvain, Brussels, Belgium

Objective: The 4-parts proximal humerus fractures still prove to be a therapeutic challenge nowadays due to the high rate of complications encountered. We explored if a fibula allograft could improve fracture reduction and stability. Methods: 13 patients were operated for 4-parts proximal humerus fracture through a deltopectoral approach and reduction was performed with a fibula allograft. Osteosynthese was completed either by screws, sutures or plate. Results: while the fibula was helpful during surgery to reduce, maintain bone fragments and improved screws fixation, a high rate of complications (bone necrosis was observed. 4 patients needed further surgery. Conclusion: Fibula allograft appeared to be helpfull in facilitating fracture reduction and stability but was associated, as other techniques of fixation in this kind of fracture, with a high rate of complications. Its main interest is in the restauration of the medial column stability and in the increased screw pull out strength.

17.22 Our experience with humeral nailing
Simion F., Schiopu D., Illés T., Reynders P.
Department Orthopedics & Traumatology, University Hospitals Brussels, Brussels, Belgium

Introduction: Proximal humeral fractures are often seen in elderly patients with osteoporosis after a low energy trauma. There is no real consensus in the literature concerning the treatment of this fracture. We decided to treat all proximal and humeral shaft fracture using only one type of nail (MultiLoc), implanted in a minimal invasive manner. A two centimeters incision is made close to the anterior angle of the acromion and the nail is introduced after closed reduction. Our goal is to minimize the trauma caused by the surgery and to permit early mobilization after a stable fixation.

Method: Our study is observational retrospective: pre and postoperative radiographs of 50 consecutive patients were reviewed by two surgeons. We analyzed the type of fracture and the postoperative reduction. We noted any implant related complication and if union or malunion was encountered.

Results: The minimal invasive method gives good results in case of shaft fracture or in the 2-part proximal fractures. The reduction it’s also possible in some 3-part fractures without bone lose when reduction of a large fragment is achieved by the large headed screws. In 3 and 4-part fractures with bone loss after fracture