Reconstruction of the acromion, to achieve pain relief and better function of the deltoid muscle. After partial or complete removal of the acromion. General surgical contraindications. Paresis of the axillary nerve. Strategy of the operation with X-ray and CT scan. Patient in beach chair position. Disinfection of the shoulder and lateral pelvic region. Exploration of the defect area and searching for the lateral clavicula and spinascapulae end. Removal of a pelvic bone block. Fixation of the pelvic bone block to the spina scapulæ with K-wires and finally osteosynthesis by a Reco plate (Synthes, Umkirch, Germany), wound closure. For the first 6 weeks, a cast with the arm in 90° abduction. Passive motion without the cast should be performed once a day. Starting in week 7, weekly reduction of abduction (90°/60°/30°/0°). Active mobilization starting in week 10. Start to practice with weight bearing in week 13. Pain relief improved from VAS 7-9 to VAS 2-3. Improved ROM can be seen postoperatively and after 6 months for abduction/adduction 50-0-50°, anteversion/retroversion 80-0-10°, rotation out/in 40-0-10°.