Aesthetic fat grafting in elbow ulnar nerve palsy: case report

Fabio Curini-Galletti
Background: Young actor April 1, 2009 distal humerus fracture – cast for forty days. August 8, 2009 elbow ulnar nerve decompression for nerve entrapment. At our attention in March 2011: interosseous muscle hypothenar muscle and thumb adductor atrophy; little finger abduction with clawing; ulnar fingers hypoesthesia; painful limited excursion of the elbow.
The patient asks to improve hand aesthetics for professional interest; to correct little finger abduction and finger tips sensibility; to resolve pain and limitation of ROM of the elbow.
Methods: in upper arm and general anesthesia we perform ulnar nerve neurolysis with subcutaneous anteposition (fascial sling) and wrap around plus elbow release by medial approach.
We use a tendon transfer for little finger abduction and clawing.
Finally we harvest fatty tissue from abdomen. Refinement centrifugation and separation. We place 25 cc of fat in first second third fourth web space plus radial and ulnar borders.
Six months after treatment, good range of motion of elbow without pain.
Good fifth ray adduction and claw control with complete range of motion; improving in finger tip sensibility (0.7 two points)
Elegant definition of dorsum of the hand with patient satisfaction - first web need little more graft and ulnar border too
Conclusion: With ulnar nerve and elbow joint release plus tendon transfer for functions improvement, hand fat grafting in this particular case (young actor with professional aesthetic request) is a good solution to have an hand of the age of the patient and not older as appearance after ulnar nerve palsy.