

CLINICAL REPORT



Radius and Ulna Focus On Fractures

Dr. Aldo Vasta

Focus On Fractures

Clinical Report - Radius & Ulna



Dr. Aldo Vasta
Surgeon
Scientific consultant
EME s.r.l. Pesaro

INTRODUCTION

Different factors may cause a high incidence of nonunion fractures:

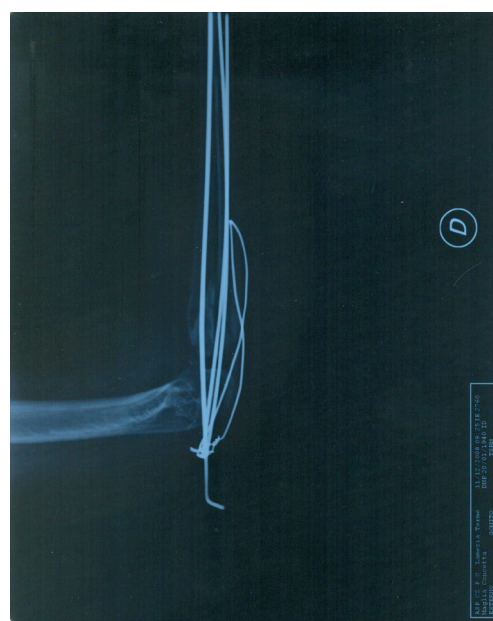
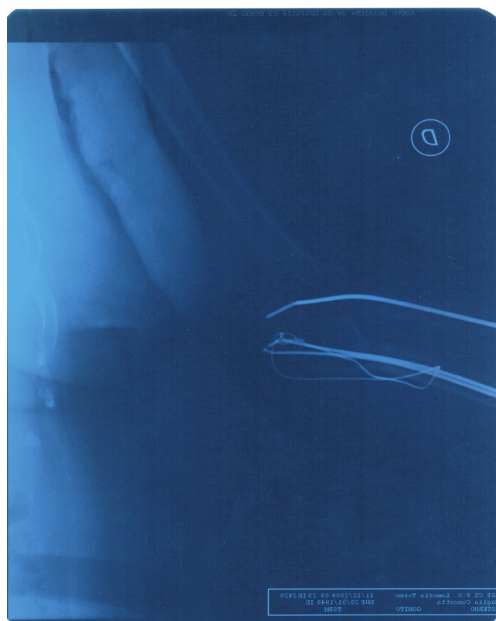
- Infections
- Excessive mobility of the fracture
- Osteoporosis
- Smoke
- Diabetes
- Compromised Vascularity
- Inadequate plaster cast immobilization
- Comminuted fractures
- Patient non-compliance
- Previous surgical operation

CLINICAL REPORT

Fracture: ulnar oleocranon and proximal third of the ulna, (comminuted) radial capitellum.

Date of Injury: 8th november 2008

Date of First X-Ray: December 2008



CLINICAL HISTORY

- 69 year old woman.
- Trauma from accidental fall and multifragmented fracture of the comminuted proximal epiphysis of radius and ulna of upper right limb. Initially the patient was treated with a soft bandage immobilization for 3 days (5.11.08).
- Operated to remove multifragmented radial capitellum and the fracture was stabilised by K-wire and cerclage fixation of the ulna, plaster cast immobilization followed (7.11.08). On 11/12/2008 the K-wire was removed. Nevertheless, radiographic examinations during plaster cast immobilization, performed 1 and 2 months after the intervention, proved a non-union with motion of the fracture fragments of the ulna.
- After two months plaster was removed and assisted passive and active cautious rehabilitation followed. The patient took on bisphosphonate (fosavance®) 1 cps. per week and calcium supplement (Dediol drops®)
- After 3 months, PEMF stimulation with the device Magnetomed 8200 - EME SRL was applied.

MATERIALS AND METHOD

MAGNETOMED 2200

Generator of pulsed low frequency electromagnetic fields (manufacturer EME SRL-Medical Italia, Pesaro (Italy)), used for the treatment of nonunion fractures with the portable solenoid CP30. Main treatment parameters:

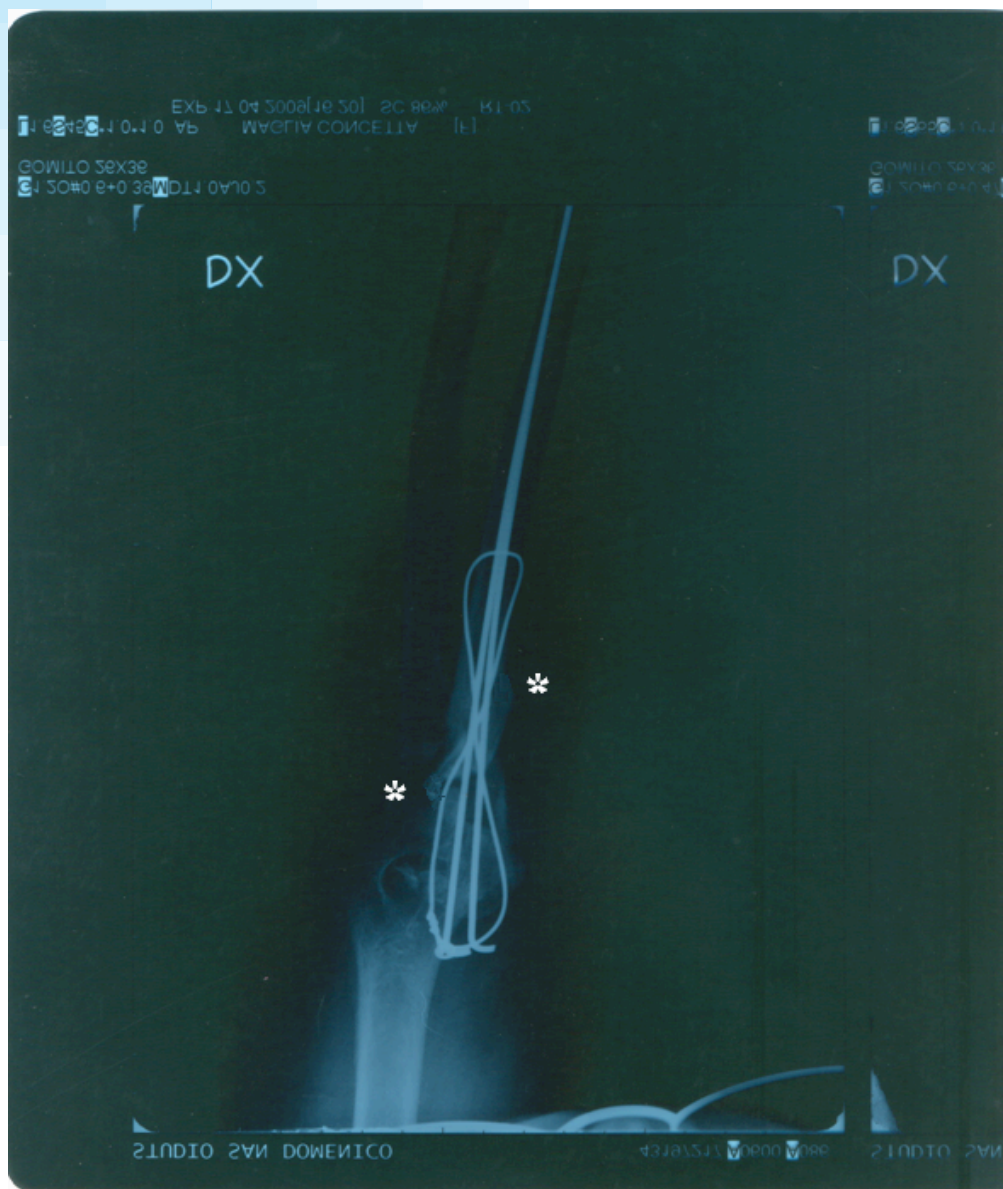
- 25 gauss
- 75 hz
- Stimulation duration around 60 minutes.



*Evident non-union
X-Ray dated 10.10.2009*



*Initial bone callus formation
X-Ray dated 03.03.2009
(after about 1 month of PEMF treatment)*



*X-Ray dated 17.04.2009
Evident improvement of the bone callus formation
(especially in the zones marked by an asterisk)*



MEDICAL ITALIA

EME s.r.l.

Via degli Abeti 88/1

61122 Pesaro (PU) - Italy

Ph +39 0721 400 791 **Fx** +39 0721 26 385

info@eme-srl.com

www.eme-srl.com