Internal hardware exposure in non-unions

Microbiological wound examination and evaluation of inflammation markers*

Infection / Contamination?

- Targeted antibiotic therapy and serial irrigations**
  - 1. Necrotic tissue on admission
  - 2. Necrosis occurring within 1 week
  - 3. Local secretions occurring within 1 week
  - YES
  - Surgical debridement and pulsed water washings
  - NO
  - Microbiological wound examination and evaluation of inflammation markers*
    - Infection / Contamination?
      - YES
        - Internal hardware removal
      - NO
        - “Second look” debridement and reconstruction with pedicled flap

Debridement, pulsed water washings, empiric antibiotic therapy and reconstruction with pedicled flap

* After having excluded other causes of inflammation, C-reactive protein’s trend is employed as contamination index. Patients with positive CRP are treated with antibiotic therapy.

** With antiseptics.