

## Clinical suspicion of SANJO

- Painful joint and/or joint inflammation (red, hot, swelling)
- Joint effusion
- Sinus tract after surgery / trauma



## Diagnostic joint aspiration

Synovial fluid analyses in order of priority:

1. Culture of Synovial fluid
2. White blood cell count (WBC)
3. Presence of crystals



## Indicators of SANJO

- Purulent aspirate or drainage
- Synovial WBC  $>50.000 \text{ cells}/\mu\text{L}^1$
- Polymorphonuclear percentage (PMN%)  $>90 \%^1$
- Microbial growth in synovial fluid



### Antibiotic treatment<sup>2,3</sup>

Gram staining:

- Gram-positive (GP): cloxacillin or cefazolin
- Gram-negative (GN): ceftriaxone
- Negative stain: GP+GN coverage

### Surgery<sup>4</sup>

- Arthroscopic debridement is recommended for most cases
- Open debridement may be indicated in severe cases and, when needed in small joints

<sup>1</sup> SANJO can be present without an elevated white blood cell count (WBC) or percentage of neutrophils (PMN%). Gout, pseudogout and rheumatic diseases can also cause elevated WBC and PMN%.

<sup>2</sup> Empirical antimicrobial therapy should be adapted to local epidemiology and individual risk factors for methicillin-resistant *S. aureus*, *P. aeruginosa* or other resistant pathogens. Target therapy is imperative once the cultures are available.

<sup>3</sup> In case of sepsis or septic shock, antibiotic should be administered even before joint aspiration.

<sup>4</sup> Surgical treatment may be postponed  $\leq 24\text{h}$ , if: 1) the patient has no sepsis/septic shock, 2) the joint is drained and irrigated by re-aspiration of saline injection until clear fluid is obtained, 3) empirical antibiotic treatment has been started, and 4) an experienced surgeon can perform the procedure.