VIII Jornada grupo GEIO

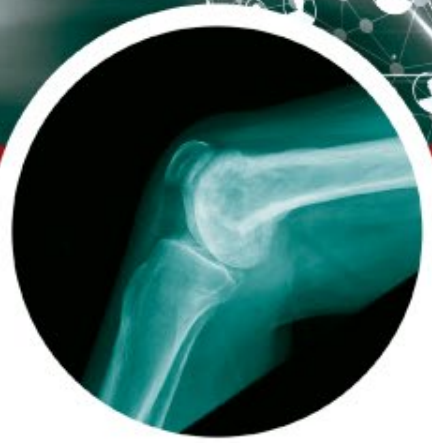
GRUPO DE ESTUDIO DE INFECCIONES OSTEOARTICULARES

2023

NUEVOS RETOS EN INFECCIÓN OSTEOARTICULAR (IOA)

Current Aetiology of Prosthetic Joint Infections (CAPJI)

Tailoring empirical treatment and antimicrobial prophylaxis in joint replacement surgery



Madrid

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Objectives

Global epidemiology

- differences between geographical areas

Microbial aetiology

- potential geographical differences (adjusting)

Risk factors for specific MDRO & other R to SAP

- PJI: Empirical treatment
- Joint replacement surgery: surgical antimicrobial prophylaxis (SAP)

tailored to specific patient characteristics

Collection of PJI-causing strains

Methods

COHORT: patients with PJI

RETROspective cohort
- **patients with PJI in 2021**

PROspective cohort
- **patients with PJI during 1 year (since starting)**

CASES*: PJI
- perioperatively acquired – implant surgery (1st year)
- culture-positive

shipping strains to central lab → **PJI-causing strains collection**

PK/PD studies of SAP regimens

* Kaye KS, et al. The **case-case-control study design**: addressing the limitations of risk factor studies for antimicrobial resistance. Infect Control Hosp Epidemiol. 2005; 26: 346–51.

Methods

Case-case-control study

CASES: PJI

- perioperatively acquired – implant surgery (1st year)
- culture-positive

CONTROLS: patients with arthroplasty WITHOUT PJI

- For each case, 2 patients (“same surgery”, next closest date)

Kaye KS, et al. The **case-case-control study design**: addressing the limitations of risk factor studies for antimicrobial resistance. Infect Control Hosp Epidemiol. 2005; 26: 346–51.

Case-case-control study

CASE 1: PJI –susceptible phenotype (e.g. MSSA)

- For each case, 2 uninfected patients ("same surgery", next closest date)

Risk factors - susceptible phenotype (e.g. MSSA) PJI vs no infection

Specific risk factors for MRSA

Risk factors - resistant phenotype (e.g. MRSA) PJI vs no infection

CASE 2: PJI –resistant phenotype (e.g. MRSA)

- For each case, 2 uninfected patients ("same surgery", next closest date)

Kaye KS, et al. The **case-case-control study design**: addressing the limitations of risk factor studies for antimicrobial resistance. Infect Control Hosp Epidemiol. 2005; 26: 346–51.

Situación actual

≈ 120 hospitales, 5 continentes

Puesta en marcha de la **parte retrospectiva** del estudio:

- Cohorte retrospectiva de IPA 2021
- Selección de "casos" de la cohorte
- Controles no infectados: 2 por cada "caso"

Revisión de los **comités de ética** de cada centro

Elaboración de **base de datos electrónica** (CAPRed)

2023

¡Gracias!

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