

Factors Associated with Perioperatively Acquired Prosthetic Joint Infection Caused by Multidrug-Resistant Organisms: A Multinational Case-Case-Control Study

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STUDY AT A GLANCE

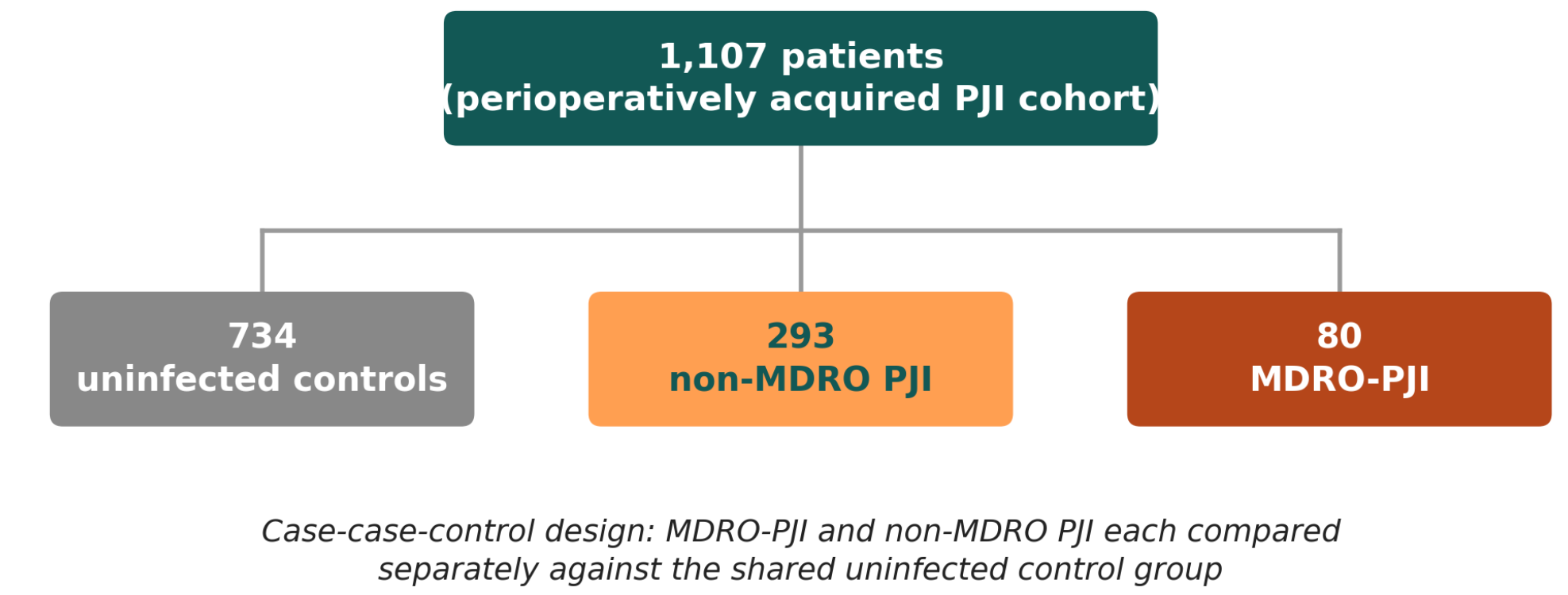


INTRODUCTION & AIM

- Multidrug-resistant organisms (MDROs) are an increasing challenge in prosthetic joint infection (PJI).
- Identifying factors associated with perioperatively acquired MDRO-PJI may help refine preventive strategies.
- We aimed to identify factors specifically associated with perioperatively acquired MDRO-PJI in a multinational setting.

METHODS

- Multinational retrospective study across 56 centres in 16 countries, focused on perioperatively acquired PJIs, using a case-case-control design¹: infections caused by MDROs and by non-MDRO organisms were each compared separately with a common uninfected control group.
- Factors associated with MDROs but not with non-MDRO infections were considered specific to MDRO-PJI. MDROs were defined per Magiorakos criteria².



CONCLUSIONS

- MDRO-PJI showed a distinct preoperative profile from non-MDRO PJI, dominated by preoperative anemia, recent healthcare exposure, MDRO carriage, and urgent or fracture-related surgery.
- These findings may inform targeted screening and preventive strategies; adjusted analyses are needed to refine these associations.

REFERENCES

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On behalf of the CAPJI-RETRO Study Group steering committee. We thank all 56 participating centres across 16 countries for their contribution.

Figure 1. MDRO-PJI prototype patient

