

MY TOP 5 TAKES ON A PAPER TITLED

Rifampin combination therapy in staphylococcal prosthetic joint infections (PJI): A Randomized Controlled Trial

INTRODUCTION

Staphylococci are the most common etiologies for PJI. They can form biofilm, making Staph. PJI eradication difficult. Therefore, rifampin is combined with another agent to overcome this.

PROCEDURES

Patients with early operative and acute hematogenous PJI due to Staphylococci were recruited. All underwent debridement and implant retention (DAIR).

During the procedures, 8 intraop samples (1 periprosthetic and 1 synovial fluid) were collected and 2 gentamicin sponges were placed in the wound before closure. No drains were used.

TREATMENT

Empiric treatment:

Cloxacillin (2gm Q6H) + vancomycin (1gm Q12H) till cultures were +

Targeted treatment:

MSSA

Rif 300 mg Q8H x 6/52

+

IV cloxa 2 g Q6H x 2/52 then PO 1g Q6H x 4/52

MRSA

Rif 300 mg Q8H x 6/52

+

IV vanco 1g BD x 6/52

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Non rif-arm (control group) received similar regimens, minus the rifampin.

RESULT (OUTCOMES)

N = 48, median age: 68.5 years old

Staph. aureus: 36 and CONS: 14

23 received rifampin

39 hip prosthesis and 9 knee prosthesis

Comparable eradication rates of Staph PJI at 2 years in both the arms (74% vs. 72%, P=0.88)

CONCLUSION

Adding rifampin to cloxacillin or vancomycin in patients with acute Staph PJIs does not affect the cure rate of a DAIR procedure.