INFLUENCE OF AUGMENTED RENAL CLEARANCE IN THE LOWER INCIDENCE OF LINEZOLID-RELATED HAEMATOLOGICAL TOXICITY

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Background and importance

Hematological-linezolid-related toxicity has been described to be a major cause in treatment interruption and transfusion requirements, especially in renal injured patients (<60 mL/min/1,73m2).

Aim and objectives

To evaluate the influence of Augmented renal clearance (ARC) in the incidence of haematological toxicity as part of the antimicrobial stewardship program in which participates our Pharmacy Department.

Matherial and methods

Type of study

Retrospective Observational

Patients included in the study

ARC patients
> 130 mL/min/1,73m2 (♂)
> 120 mL/min/1,73m2 (♀)

VS

Reference patients
60-90 mL/min/1,73m2

Included

1) Linezolid treatment >5 days
2) Hospitalised >18 years old patients

Excluded

1) Critically ill
2) ≤100 × 103/mm3 platelet
3) <10mg/dL haemoglobin

Variable registered

Demographical
- Gender
- Age

Clinical
- Duration of treatment
- Site of infection
- Haematological parameters (platelets, hemoglobin, neutrophils)
- Inmunosupressant therapies (IS)
- Chemotheraphy <6 monts (CT)

Haematological toxicity

Decrease from baseline

25% platelets
25% hemoglobin
50% neutrophils

Data colection methods

XLSTAT program

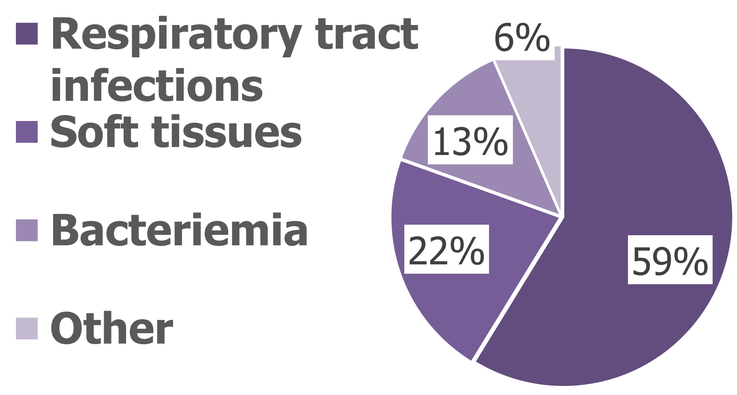
Electronic sistema data

Fisher test

Results

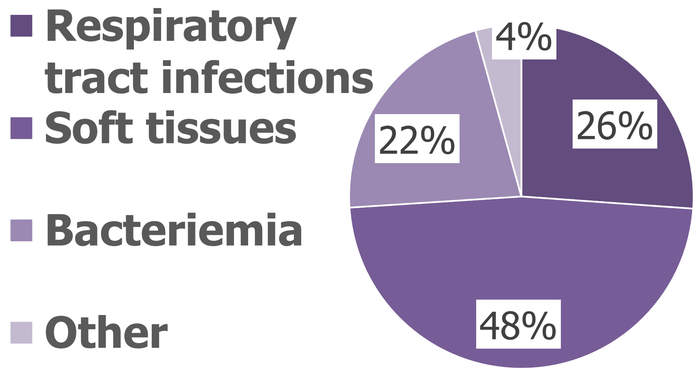
ARC patients (N=46)

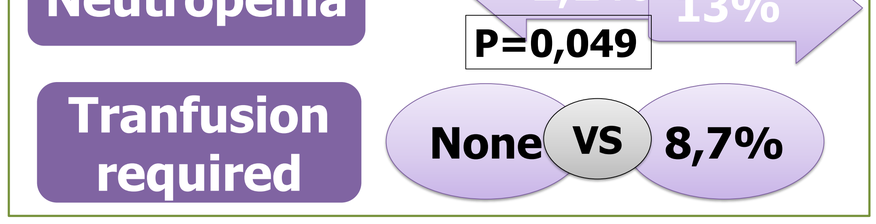
- 54% (♂)
- 39 (18-74) years
- 7 (5-28) days
- 8,7% (IS)
- 8,7% (CT)



Reference patients (N=46)

- 71% (♂)
- 57 (21-79) years
- 9 (5-25) days
- 17,4% (IS)
- 8,7% (CT)





Conclusion and relevance

Our findings suggest an association between ARC and a lower incidence of haematological toxicity.