NHS
Ayrshire & Arran

Management Protocol for Gram-Negative Bacteremia (GNB)

INITIAL IDENTIFICATION & SEVERITY ASSESSMENT

Gram-Negative Rod / Bacillus (GNB)

These results must always be considered clinically significant; check cultures for previous resistance to gentamicin or temocillin and P. aeruginosa resistance.

Initial Assessment: Is NEWS2 Score ≥ 7?

URGENT Senior Clinical Review Immediately.

SOURCE IDENTIFICATION & TARGETED ACTIONS

Urosepsis (Most Common)

If a urinary catheter has been in situ for more than 7 days, consider an immediate catheter change.

Intra-abdominal Infection

Consider the need for imaging and surgical source control; add remaming agents for anaerobic cover as per empirical guidelines.

HAP or Uncertain Source

For Hospital-Acquired Pneumonia or sepsis of an uncertain source, consider adding additional cover in line with specific empirical guidelines.

No Obvious Focus

If there are no features of sepsis or an obvious source, take a further set of blood cultures before administering gentamicin.

TREATMENT PROTOCOL (THE "TREATMENT COMMAND")

Give Stat Dose of IV GENTAMICIN

Use the gentamicin calculator for dosing; do not give if the patient is already receiving it, has absolute contraindications, or known previous resistance.

Alternative: Increased Dose Temocillin

Use if there is no penicillin allergy, no previous temocillin resistance, and no recent isolates of Pseudomonas.

"Life Jacket" Guidance (Option 2)

Follow this protocol if there is both gentamicin contraindication and penicillin allergy, or resistance to both primary options.

DOCUMENTATION & OVERSIGHT

Final Documentation

Ensure the blood culture result, clinical review, and NEWS2 score are documented clearly in the patient's notes.

Consultant Microbiologist Follow-up

All cases of GNB are followed up by a Consultant Microbiologist to advise on further investigations and treatment duration.