

Testing for dissociated resistance in staphylococci

A detailed explanation of constitutive and inducible resistance is given in the following chapter on the BSAC website:

Interpretative reading: recognizing the unusual and inferring resistance mechanisms from resistance phenotypes

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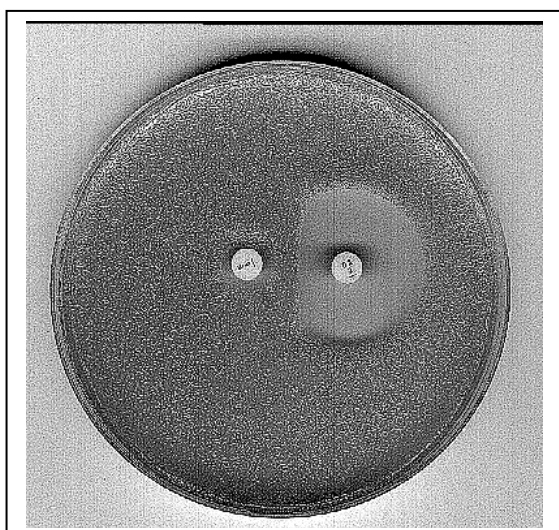
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MLS_B resistance: Interpretation of susceptibility testing results

Erythromycin	Clindamycin	Interpretation
S	S	Type 1: Organism susceptible to both erythromycin and clindamycin
R	R	Type 2: Organism resistant to erythromycin and clindamycin (constitutive MLS _B)
R	S	Type 3: May have inducible resistance (inducible MLS _B)

Detection of inducible MLS_B resistance in isolates susceptible to clindamycin, but resistant to erythromycin:

1. Inoculate an ISA plate with a suspension of organism to give semi-confluent growth (see BSAC Disc Diffusion Method for Antimicrobial Susceptibility testing).
2. Place a 5 µg erythromycin disc and a 2 µg clindamycin disc 15mm apart edge to edge.
3. Incubate at 35-37°C for 18-20 h.
4. Examine the zones of inhibition for blunting as shown below.



Organisms exhibiting blunting

Isolate has MLS_B and clindamycin should be used with caution (if at all).

NB.

Disc on the left 5 µg erythromycin, disc on right 2 µg clindamycin