Should Bacitracin Sensitivity be Used in the Presumptive Identification of Group A Streptococci?

Dear Editor,

The presumptive identification of group A streptococci (GAS) is usually done by testing for sensitivity to bacitracin. Many laboratories use this as the sole test for diagnosing GAS infections due to the difficulty in performing serogrouping and high cost of antisera. We have tested a total of 216 beta hemolytic streptococci by serogrouping using commercial antisera (Bio-Rad, Australia) and bacitracin sensitivity using 0.04U disks (Hi Media, Mumbai). One hundred and sixty three strains were serogrouped as group A, 21 as group G and 32 as group C streptococci. We found 9.8% (16/163) strains of GAS were resistant to bacitracin, whereas 85.7% (18/21) strains of group G streptococci and 90% (29/32) strains of group C streptococci were sensitive to bacitracin.

The bacitracin sensitivity test has been in use for more than half a century. Several workers have used different interpretation criteria and varying concentrations of bacitracin in an effort to define the accuracy of the test in identifying GAS. Nevertheless it appears from this study that the utility of the test even as a preliminary test for screening GAS is debatable.

References


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Received: 19-01-2005
Accepted: 22-03-2005

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Received: 26-04-2005
Accepted: 08-06-2005