BEHAVIOUR OF ACINETOBACTER STRAINS WITH NORMAL HUMAN SERUM

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SUMMARY

The bactericidal activity of normal human serum (NHS) and treated NHS to avoid either the classical complement pathway (CPC) or the alternative complement pathway (APC) was studied with four strains identified as Acinetobacter baumanii. Three of them were sensitive to serum whereas only one was serum resistant. The serum sensitive strains showed different susceptibility mechanisms: one strain was sensitive to both the CPC and the APC and the others were sensitive only to APC.

Serum sensitive and serum resistant strains showed on PAGE-SDS and silver stain incomplete profiles of lipopolysaccharides (LPS). In all cases the carbohydrate percentage of LPS was lower than the value corresponding to Salmonella enteritidis with complete profiles of LPS. The strain sensitive to CPC and APC had a lower carbohydrate content. The serum sensitivity of the three strains could be attributed to the presence of incomplete LPS, while the serum resistance could be assigned either to small variations in the LPS composition or to some particular membrane component.

Key words: Acinetobacter strains, human serum

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