

Distribution of CBP genes in *Streptococcus pneumoniae* isolates in relation to vaccine types, penicillin susceptibility and clinical site.

ABSTRACT

Choline-binding proteins (CBP) have been associated with the pathogenesis of *Streptococcus pneumoniae*. We screened, using PCR, for the presence of genes (cbpA, D, E, G) encoding these proteins in 34 isolates of pneumococci of known serotypes and penicillin susceptibility from invasive and non-invasive disease. All isolates harboured cbpD and cbpE whereas cbpA and cbpG were found in 47% and 59% respectively; the latter were more frequent in vaccine-associated types and together accounted for 77% of these isolates. No association was observed with penicillin susceptibility but 85% of non-invasive isolates were positive for these genes.

Keyword: Choline-binding proteins (CBP); *Streptococcus pneumoniae*; Penicillins; Pneumococcal vaccines; Genes.