

DISTRIBUTION OF SEROTYPES OF CLINICAL GROUP B STREPTOCOCCI ISOLATED IN BELGIUM: A DECADE-REVIEW

Pierrette MELIN, Patrick DE MOL

Natl. Reference Lab. for GBS, Univ. Hosp., Liege, Belgium

XVII LISSSD 2008

Background-Objective: Group B streptococcus (GBS) is the major cause of severe neonatal invasive diseases; pregnant women and non-pregnant adults are also affected by severe GBS diseases. In the last decades, capsular serotypes Ia, Ib, II and III caused the majority of diseases. In order to follow and understand epidemiological changes and to provide information related to capsular types to include in a future vaccine, a decade-review of yearly-distributions of serotypes of GBS isolated in Belgium among different patients' age-groups was done.

Methods: From January 1998 to December 2007, 1021 (80-122/year), significant strains of GBS isolated in laboratories belonging to the Belgian surveillance network and consecutively received by the reference laboratory, were serotyped. 300 strains were recovered from neonates' blood, cerebrospinal fluid or any deep site (236 early-onset and 64 late-onset diseases, EOD/LOD), 721 were recovered from adults and pregnant women with severe infections.

Results Among isolates from neonatal EOD, type III (43.2%) was the more common type followed by Ia (14%), II (13.1%), V (11%), Ib (10.2%) and IV (3%), whereas, steadily, type III caused most of LOD cases (75%). Among adults' strains, the 3 major types were 22% V, 20 % III and 19.3% Ia, followed by 12.6% Ib, 11.1% II, 4.4% IV and 9.6% either belonged to VI, VII, VIII or were non typable. Through the decade the trend among EOD and adults isolates was a relative increase of type V isolates.

Conclusions: 1) Type III was still the major type in neonatal infections. 2) Type distributions of GBS differed by patients' age-group 3) Type V belonged to the 3 more represented types in adults 4) A relative increase of serotype V was observed.