

Perpartum anti Group B *Streptococcus* Antibio prophylaxis : What would be the impact of the CDC's Guidelines in a French Hospital ?

DM Poisson ¹, ML Evrard ², M Lanet ¹, MI Vives ², A Ramos ², L Mesnard ².

1 – CHR Orléans, Microbiologie (L. Bret – A. Guigon) ; 2 – CHR Orléans, Pôle Mère-Enfant (J. Bentata – I. Peteul).

Background. Regardless of purely obstetrical indications, perpartum antibioprophyllaxis is indicated in women harbouring Group B *Streptococcus* in their flora.

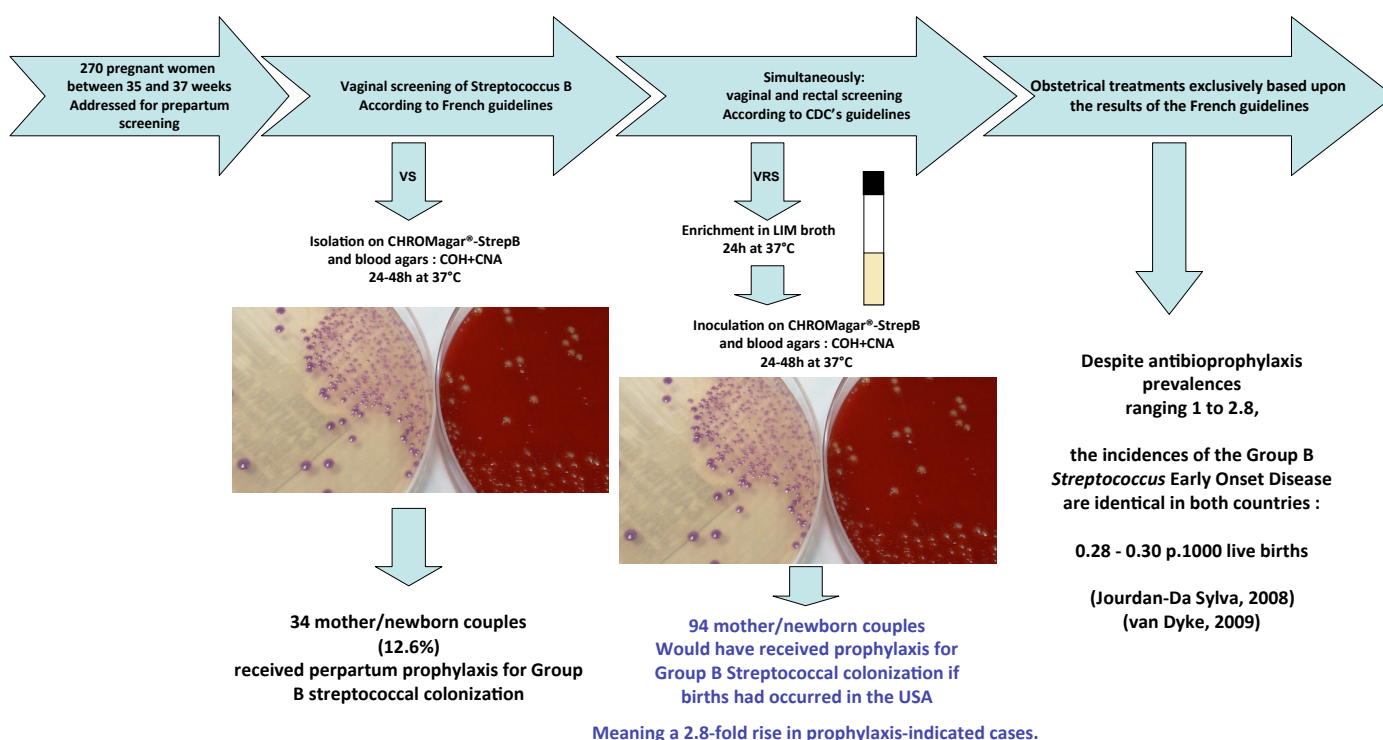
But while French guidelines will consider exclusively the vaginal carriage, screened between 34 and 38 weeks (ANAES, 2001) and cultured on blood agar plates, the CDC's guidelines will also consider the ano-rectal carriage, screened between 35 and 37 weeks, and cultured after an enrichment step (Schrag, 2002).

The purpose of this study was to evaluate the impact of CDC's guidelines, if enacted in a French Regional Hospital.

Patients. In Orléans (spring 2010), 270 pregnant women, addressed for perpartum (35 - 37 weeks) *Streptococcus* B screening, were sampled and analysed according to both guidelines in parallel.

The study was an observational one : the medical staff was aware of the CDC-guided results, but therapeutic decisions exclusively followed the French guidelines.

Methods. The vaginal swab (VS) was isolated on a blood agar plate (COH), an anaerobic CNA plate and a chromogenic medium (CHROMagar StrepB) (Poisson et al., 2010). The vaginal/rectal swabs (VRS) were transported in a Port-A-Cul tube (BD, USA), then enriched 24h at 37° in LIM broth (BD, USA), and subcultured on plates of the same three media.



Results. In sum, 34 women had a positive vaginal swab (12.6%), and 94 had a positive vaginal/rectal swab (34.8%).
Were negative on both sites : 174 women.
Were positive on both sites : 32.
Were positive on the vaginal swab only : 2 (obstruction due to digestive saprophytes).
Were exclusively positive on the rectal swab : 62.
Streptococcus B carriage indicated the antibioprophyllaxis for : 34 mother/newborn couples
In the USA, 94 couples would have received it.
Resulting in an antibiotic pressure risen 2.8 fold.

Discussion.
The incidence of Group B *Streptococcus* Early Onset Disease has decreased in France : estimations going down from 0,69 p.1000 live births in 1997 to 0.28 in 2006 (Jourdan-Da Sylva, 2008).
In the USA, the disease incidence is identical (0.30 p.1000 live births), anti-Group B *Streptococcus* prophylactic molecules are identical, but, due to the involvement of the rectal carriage, the ratio of women receiving antibioprophyllaxis is risen 2 to 3 fold : 31.7% in 2003-2004 (Van Dyke, 2009).

Literature references.

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