

## Comments About Prevention Strategies for Early-Onset Neonatal Group B Streptococcal Disease

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I read the recently published article by Ana Sofia Simões and colleagues in the Portuguese Journal of Pediatrics.<sup>1</sup> It describes a very interesting analysis about the management of group B streptococcal infection in the last 24 years in their hospital maternity ward. As asked by the editors in the editorial,<sup>2</sup> I would like to contribute a few comments.

The authors compare three different phases of the prevention of perinatal group B streptococcal infection in newborns in their maternity ward. Even not achieving statistically significant data, this is useful work to study this problem. Namely, to support the effectiveness of universal intrapartum group B streptococcal screening, which is now the gold standard approach.

Although it is not exactly one of the study objectives, to improve data interpretation it would be important to know how many women were colonized in the third period of the study and how many carried out correct intrapartum antibiotic prophylaxis. It will be informative if the authors comment about the fact that, in 27 infected newborns, only one mother was colonized, and if this was in the third period of study (it is not clear in the paper). There is a worrisome fact that the other infected five newborns in the third period were born to mothers who were not colonized and consequently not expected to be at risk.

The data in Table 2 could be clearer if the authors explain how many of the 11 mothers with risk factors for infection did intrapartum antibiotic prophylaxis even if not colonized with group B *Streptococcus*. Why did the only colonized mother not receive intrapartum antibiotic prophylaxis? It was in the third period of the study? Or was she same mother who in 2019 had the result that was only known after delivery?

Another interesting aspect is the fact that 19% of the infected newborns had active resuscitation at birth. This is a much higher percentage than the one usually seen in a delivery room, and perhaps an important aspect that must be considered when evaluating the data. How many of them were preterm?

Prematurity is always a risk to neonatal morbidities and mortality. The authors state that "...we would like to emphasize that most infants were born at term (74%). This could be explained by the fact that the total number of preterm newborns is much lower and all of them receive prophylaxis". I do not agree with this point of view because if 26% were preterm, even if the authors do not state the total rate of prematurity in their maternity ward (usually it is around 10% of all newborns), this is a very significative figure confirming the literature data that there are many more cases and morbidity in the earlier gestational ages.<sup>3</sup> The authors state that all of them received prophylaxis; that could be a subject for further discussion.

The case of the newborn who presented at the fourth day of life is worrisome because usually invasive neonatal group B streptococcal early-onset disease management is oriented to an early clinical manifestation. The authors could give more details about this special situation.

The maternal group B streptococcal colonization status of the baby who died was unknown; he was born during the universal screening period. What happened exactly? How many maternal group B streptococcal colonizations are still unknown intrapartum and how are they managed?

**Keywords:** Infant, Newborn; Infectious Disease Transmission, Vertical/prevention & control; Portugal; Pregnancy Complications, Infectious; Streptococcus agalactiae; Streptococcal Infections/prevention & control

### Conflicts of Interest

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