Increasing Trend of Invasive Group B Streptococcal Infections, Marseille, France

To the Editor—We read with interest the article by Lamagni et al that describes a steady rise from 700–800 to 1652 per annum during the 1991–2010 period of invasive group B streptococcus (GBS) infections in England and Wales, most pronounced among adults [1]. This was identified based on routine microbiology laboratory reports undertaken across these countries through an automated biosurveillance system [1, 2], and was triggered by the description of an increase of invasive GBS disease in nonpregnant adults in the United States [3]. Since 2002, a weekly surveillance system of infections based on clinical microbiology data was implemented in our center, which is similar to that described in England and Wales and aims at detecting abnormal events [4]. In spring 2013, we extended our surveillance panel to all bacterial species found from 2002 through 2012 in our laboratory, including 459 different species identified from approximately 500 000 bacterial isolates [5]. Unexpectedly, we detected that GBS was, from weeks 16–25 of 2013, the ninth most frequently identified bacteria. These data and Lamagni et al’s findings prompted us to analyze the incidence since mid-2008 (no earlier comprehensive data being available) of invasive GBS infections in our institution that gathers university hospitals of Marseille, the second-largest French city.

A total of 334 invasive GBS infections were diagnosed over the July 2008–
September 2013 period, based on culture from blood in 42% of cases, or from cerebrospinal fluids (2%), joints or bones (12%), and other normally sterile sites. We found an increasing trend of the number of invasive GBS infections (slope = 0.0065, \( P = .0345 \), Poisson regression) with a 1.4-fold increase, from 49 to 71, of the number of cases diagnosed between the first and last 12-month periods of follow-up (Figure 1); a 1.5-fold rise (from 44 to 67) was observed among patients older than 15 years. A structural change analysis suggested a change point of the regression coefficient on August 2011. This knee-point may be observed on the LOESS regression (locally weighted polynomial regression) curve, with a strong progression until the change point (slope = 0.0145, \( P = .0346 \), Poisson regression), followed by a plateau since this date (slope = 0.0065, \( P = .0475 \), Poisson regression).

Although we diagnosed in our single center far less invasive GBS infections than in nationwide studies conducted in England and Wales over 20 years (21 386) \[1\] or in the United States (in 10 states) over 6–17 years (14 573 and 19 512 in 2 studies \[3, 6\]), we observed an increasing trend of invasive GBS infections over the past 5 years. Reasons for such increases are unresolved \[1, 3\]. These data demonstrate the relevance of systematic surveillance of infections at various scales and in different geographical areas, which enable awareness of epidemiological changes and of their geographical spread.

Note

Potential conflicts of interest. All authors: No reported conflicts.

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