

## **Invasive group A streptococci (iGAS) infections in children**

Updated statement of the Pediatric Infectious Disease Group Switzerland (PIGS), March 31

### **Background**

Since November 2022, the number of invasive Group A streptococcal (iGAS) infections in children in Switzerland registered by the Swiss Pediatric Surveillance Unit (SPSU) has increased significantly (162 reports from October 2022 to February 2023; in comparison, 41 pre-pandemic reported cases in 2019). In some cases, the course of the disease was severe and required intensive care.

Unfortunately, 4 children have died so far (as of March 31, 2023). An increase in iGAS cases has also been observed in other European countries, e.g. in the UK, which also led to temporary adjustments for recommendations for dealing these cases, especially in the management of close contacts of iGAS cases. Although iGAS are serious bacterial infections requiring rapid and often multidisciplinary treatment in hospital, the risk of iGAS to contacts, even close contacts (same household), is minimal (LINK; Review)

### **Situation in Switzerland**

Of all iGAS infection reported to the SPSU, only a few were known to be close contacts to persons with evidence of group A streptococcal infection (non-invasive). A regional data analysis from Bern shows neither evidence of local clusters nor of iGAS cases in children who previously had a non-antibiotic treated suspected GAS infection such as tonsillopharyngitis (unpublished data, personal communication C. Aebi).

### **Evaluation**

- Based on the current data regarding the situation in Europe (no evidence of a particularly virulent bacterial strain in iGAS), the minimal risk of secondary cases of iGAS, the above-mentioned data from Switzerland, and the lack of possibility of eradicating GAS with a single dose antibiotic treatment, there is still no universal recommendation for antibiotic prophylaxis in asymptomatic contacts of iGAS cases.

An antibiotic prophylaxis may only be considered on a case-by-case basis in very specific situations after consultation with an ID specialist.

### **Therefore,**

- the current guideline that children with uncomplicated GAS tonsillopharyngitis should generally be treated symptomatically and without antibiotics remain unchanged;
- children who have a persistent high fever, a significant reduction in their general condition and/or additional symptoms such as breathing difficulties, pain and/or swelling in the ENT region, reddened skin, muscle or joint pain (especially if active chickenpox is also present), are at risk of iGAS. In these cases, a rapid medical assessment and decision on antibiotic treatment and, if necessary, hospitalization are indicated.

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