STUDY PROPOSAL: TOWARDS STREPTOCOCCAL INFECTIONS WITH NONSPECIFIC SYMPTOMS

Arturo Tozzi
Center for Nonlinear Science, Department of Physics, University of North Texas, Denton, Texas, USA
1155 Union Circle, #311427 Denton, TX 76203-5017 USA
tozziarturo@libero.it

PREMISE

In 2023, increases in scarlet fever's incidence have been detected throughout Europe. Based on general pediatricians' experience, we hypothesize that a shift has occurred in both group A streptococcus (GAS) clinical findings and age of onset. Therefore, we propose to evaluate whether the well-standardized signs and symptoms leading to GAS diagnosis still hold.

STUDY DESIGN

Children of every age (also <3 years) with fever, but without the specific diagnostic signs and symptoms of GAS infection, will undergo Strep test throat swab (swab 1). All the positive children will be treated with the standard therapy of 10-days amoxicillin. After the therapy, another swab will be performed on the treated children (swab 2).

POSSIBLE OUTCOMES

- 1) If swab 2 will be still positive, this means that children are either carriers, or, very rarely, therapy-resistant.
- 2) If swab 2 will be negative, this means that children underwent a GAS infection characterized by nonspecific signs and symptoms.

We also expect that the age of GAS infection could be lower than suggested in literature, i.e., that GAS currently also infects children <3 years.