

ASSOCIATION BETWEEN BIRTH ASPHYXIA AND SPEECH DELAY
RELATED TO SENSORINEURAL HEARING LOSS IN CHILDREN: A
STUDY IN RSUP DR SARDJITO YOGYAKARTA FROM 2009 TO 2013

Nanet Fithia**, Retno Sutomo*, Eggi Arguni*

*Pediatric Dept. Medical Faculty of Gadjah Mada, Yogyakarta

**Undergraduate Student Medical Faculty of Gadjah Mada, Yogyakarta

ABSTRACT

Background: Speech delay is one of the most common developmental concerns in pediatric field. One of the most common causes is sensorineural hearing loss. Birth asphyxia occurs with great incidence in prolonged delivery. Birth asphyxia can cause disturbances in cochlea which leads to speech delay-related sensorineural hearing loss in children.

Objective: To find association between birth asphyxia and speech delay related to sensorineural hearing loss.

Method: The method used in this research is a case control study. The history of birth asphyxia was traced prospectively in each group. Subgroup analysis of prematurity was done for both groups. This research was conducted at the Medical Faculty of UGM, Yogyakarta from 2009 - 2013. A total of 135 data are used as study samples, divided into two groups consisted of 45 cases and 90 controls. This research was conducted in 2 phases, secondary data collection from medical record and data analysis. Strength of association was expressed in p value, odd ratio and CI 95%.

Result and conclusion: There is no association between history of perinatal asphyxia with speech delay related to sensorineural hearing loss.

Keywords: Asphyxia, sensorineural hearing loss, speech delay, risk factor