

Evaluation of the incidence of congenital hypothyroidism in Ardabil based on gestational age and birth weight in 2020

Abstract

Background: congenital hypothyroidism is one of the most common preventable causes of mental retardation. The average incidence of this disease in Iran is estimated to be one in 1000. Newborn screening and timely treatment during the first 2 weeks of life can prevent complete cognitive disorders of the newborn.

Aim: The purpose of this study is to determine the incidence of congenital hypothyroidism in Ardabil during 2020 and to investigate the frequency of this incidence based on gestational age and birth weight.

Materials and Methods: This study is a descriptive-cross-sectional study. In this study, all the infants born in the city of Ardabil during 2020, which were 7988 live births, were included in the study, of which 30 cases were diagnosed with congenital hypothyroidism. The data were collected from health centers, which included hypothyroidism screening results, gestational age, birth weight, and a family history of thyroid diseases. The data were analyzed by SPSS statistical software version 26.

Results: In this study, among 7988 live births, 30 cases of congenital hypothyroidism were found. 53% of the infants with congenital hypothyroidism were boys and 47% were girls. Among infants with congenital hypothyroidism, the average birth weight was 3.03 ± 0.763 kg and the average height at birth was 47.28 ± 4.09 cm. and the average gestational age was 37.57 ± 2.38 weeks also 80% had no family history of thyroid disease.

About 63 percent of the cases were born of non-relative mothers and fathers. The highest share in the occurrence of the disease (33.3%) happened in spring.

Conclusion:The results showed that the incidence of congenital hypothyroidism in the city of Ardabil is higher than other regions.

keywords: Congenital hypothyroidism, screening, incidence, Ardabil