

Prokocimer T, Amir E, Blumer S, Peretz B. Birth-weight, pregnancy term, pre-natal & natal complications and child's developmental disturbances and dental disease. J Clinl Pediatr Dent 2015; 39(4):371-376.

Abstract:

**Objectives:** This cross-sectional study was aimed at determining whether certain pre-natal and natal conditions can predict specific dental anomalies.

The conditions observed were: low birth-weight, preterm birth, pre-natal & natal complications. The dental anomalies observed were: enamel defects, Total number of decayed, missing, filled teeth (total DMFT), disturbances in the tooth shape and disturbances in the number of teeth. **Methods:** Out of more than 2000 medical files of children aged 2-17 years old which were reviewed, 300 files met the selection criteria. Information recorded from the files included: age, gender, health Status (the ASA physical status classification system by the American Society of Anesthesiologists), birth week, birth weight, total DMFT, hypomineralization, abnormal tooth shape, abnormal number of teeth and hypoplasia.

**Results:** Twenty one children out of 300 (7%) were born after a high-risk pregnancy, 25 children (8.3%) were born after high-risk birth, 20 children (6.7%) were born preterm - before week 37, and 29 children (9.7%) were born with a low birth weight (LBW) - 2500 grams or less. A relationship between preterm birth and LBW to hypomineralization was found as well as a relationship between preterm birth and high-risk pregnancy to abnormal number of teeth. No relationship was found between the birth (normal/high-risk) and the other parameters inspected. **Conclusion:** Preterm birth and LBW may predict hypomineralization in both primary and permanent dentitions. Furthermore, the study demonstrated that preterm birth and high-risk pregnancy may predict abnormal number of teeth in both dentitions.