

## Oral Manifestations of Zika Congenital Syndrome - What Should Pediatricians and Dentists Know?

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Zika Virus Congenital Syndrome (ZVCS) is a condition that causes congenital defects to the fetus in women infected with the Zika virus during pregnancy. Some characteristics are present, among them the occurrence of severe microcephaly, reduction in brain tissue, excess muscle tone and limited mobility, among other alterations. Brazil is a country reporting the highest number of infections by the Zika virus. Until August 2018, 2.616 cases had been confirmed<sup>1</sup>.

Since microcephaly is a recent condition, there are few studies that describe the implications for the stomatognathic system<sup>2,3,4</sup>. Alterations in the oral cavity include hypotonia or labial hypertonia and alterations in the lingual mobility that can interfere in suctioning, swallowing and lip seal, contributing for children with this condition to become mouth breathers, causing difficulties when breastfeeding or bottle feeding<sup>2</sup>. In addition, changes in the neurological system of children with microcephaly cause lack of coordination between breathing, sucking and swallowing.

Specifically in relation to the eruption of deciduous teeth, it has been observed that children present numerous signs and symptoms closely related to this physiological process, such

as increased salivation, occurrence of gingival itching, episodes of diarrhea, irritability, gingival pruritus, among other conditions<sup>4</sup>. The presence of manifestations resulting from the eruption of deciduous teeth may directly interfere in the child's behavior and consequently in his / her adherence to the proposed therapy<sup>4</sup>. Therefore, the treatment of signs and symptoms resulting from the eruptive process may include the use of oral analgesics and oral teethers, but the use of topical anesthetics is not recommended due to the potential toxicity of these products<sup>4</sup>. Moreover, it is known that the time of formation, calcification and eruption of deciduous teeth may vary from individual to individual, influenced by factors such as sex, ethnicity, nutritional status, socioeconomic conditions, genetic factors and occurrence of congenital anomalies<sup>2</sup>. As a result, oral hygiene becomes mandatory from the moment the teeth erupt and later eruption can be even positive considering that the mother can develop a greater ability to care for the erupted teeth<sup>3</sup>.

Recent research with Brazilian children with microcephaly revealed that there is a slight delay in dental eruption, with the first teeth erupting at around 12.3 months of age<sup>3</sup>. In relation to tooth

type, the first to erupt are the lower central incisors, followed by upper central incisors<sup>3</sup>. Therefore, in relation to this characteristic, both professionals when examining any child carrying this condition should pay attention to these teeth eruption parameters.

Another extremely relevant aspect to which the pediatrician should be aware is the fact that, due to the presence of multiple comorbidities, many children with microcephaly manifest, from an early age, episodes of epilepsy and frequent seizures, being therefore habitual users of continuous use drugs. The literature has shown that many pediatric drugs include sucrose in their composition<sup>5,6</sup>. Since dental caries is a biofilm-dependent disease and sucrose is an extremely important component for its development, it is essential that mothers are correctly oriented regarding the correct oral hygiene of their children. In addition, they should be informed about the benefits of the rational use of fluoride and the proper control of dental biofilm through regular visits to the dentist<sup>2</sup>.

In view of the above, it was verified that the pediatrician is an important ally of the pediatric dentistry in the care and monitoring of children with microcephaly, considering that the care related to the health of this group of individuals is necessary throughout life and that the correct orientation by these professionals can minimize oral disorders, contributing to the improvement of the quality of life of the mother-child binomial.

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