



Eruption Hematoma and its Clinical Significance for Clinicians

Marieh Honarmand¹, *Nahid Ramazani²

¹Associate Professor, Oral and Dental Disease Research Center, Department of Oral Medicine, Zahedan University of Medical Sciences, Zahedan, Iran.

²Associate Professor, Children and Adolescent Health Research Center, Department of Pediatric Dentistry, Zahedan University of Medical Sciences, Zahedan, Iran.

Abstract

Eruption hematoma is a macular elevation in the soft tissue of alveolar mucosa seen nearly during the tooth eruption. Commonly, it does not have any clinical symptoms. In most cases, the black dome shape appearance of eruption hematoma worries parents about malignancy. Since the physicians are often the firsts who examine the affected child, this letter aims to provide clinical characteristics, etiology, pathology, and treatment of eruption hematoma to these care providers.

Key Words: Children, Clinical Diagnosis, Eruption Hematoma.

*Please, cite this article as Honarmand M, Ramazani N. Eruption Hematoma and its Clinical Significance for Clinicians. Int J Pediatr 2020; 8(5): 11367-369. DOI: **10.22038/ijp.2020.45898.3754**

*Corresponding Author:

Nahid Ramazani, Postal Address: Department of Pediatric Dentistry, Dental School, Zahedan University of Medical Sciences, Azadegan st, Khorramshahr Ave, Zahedan, Iran.

Email: ramazani77@gmail.com

Received date: Nov.21, 2019; Accepted date: Feb.22, 2020

Dear Editor-in-chief,

Eruption hematoma or eruption cyst is a dark soft tissue macular elevated area overlying the erupting tooth shortly before the emergence of the crown into the mouth (1-3). Although it is not confirmed strongly in the literature (3, 4), Caucasians are the most afflicted race by this health problem (4). It is one benign pathologic condition with a specific clinical appearance (5). No arch and location predilection (upper or lower, anterior, or posterior) has been addressed in the literature. This translucent pathologic lesion has no exact gender predilection and occurs up to the age of 20 with a peak at the age of 7 years (2). Even, in a rare form, a newborn with eruption hematoma was diagnosed (4, 6). The condition occurs in both dentitions. It is mostly diagnosed superficially as a dome-shaped lesion in alveolar gingival mucosa of second primary molar, first permanent molar, or permanent incisor (4). This rounded, soft, and floating bluish-purple swelling (full of blood or clear fluid) is common without tenderness, pain, discomfort, difficulty on chewing, and bleeding (2, 4, 7). Eruption hematoma may appear single or multiple, unilateral or bilateral, and vary in size and color from transparent blue to dark red (4). The size depends on whether the cyst occupies the primary or permanent tooth crown. The color is associated with its content (4). Mostly, eruption hematoma happens as an isolated trait. However, the condition may be accompanied by some other features such as Epstein pearl, natal teeth, and tooth malformation (4).

It is the analog of the dentigerous cyst formed in the soft tissue. Previously, it was categorized with a dentigerous cyst in one class of pathologic conditions. So, considering its histopathologic feature, it is named as the superficial dentigerous cyst. But, presented, it is considered as a separate pathologic lesion (1) because it is accompanied by a tooth in the soft tissue phase of eruption with no bone involvement (2). This is consistent with the radiographic evaluation. The exact etiology of occurrence remains controversial (2, 8). Degenerative changes in the enamel epithelium or dental lamina during amylogenesis are proposed as one theory in this regard (2). Although there is no consensus regarding its origin, some other theories have been stated. Early caries, chronic local inflammation, local infection, local trauma, local space loss of eruption, drug usage, and genetics are proposed as some etiological factors (2, 4). Amalgam tattoo, alveolar lymphangioma, pyogenic granuloma, hemangioma, and Bohn nodules should be ruled out in differential diagnosis (2, 4). In histopathological examination, the lesion represents the dentigerous cyst having connective fibrous tissue lined with non-keratinized stratified squamous cellular epithelium (4). The fibrous capsule demonstrates the infiltration of inflammatory cells as evidence of local trauma (4). Encountering eruption hematoma makes the viewer stressed and obsessed with negative thoughts such as malignancy (2).

To help to cope with the problem, a full explanation about the benign nature of the condition to the concerned and agitated parents or guardians plays an essential role in assuring them. Moreover, physicians or pediatricians may deal with many children in the age range of eruption having this condition. Since the physiologic phenomena of eruption might happen normally without any complication, these practitioners should be familiar with these milestones to handle the patients and their parents. The conservative approach of wait and watch is highly recommended in this regard (1, 4). This asymptomatic condition disappears gradually (2, 7), and, eventually, the tooth crown emerges normally (3, 4). In most cases, follow-up is the only needed modality until spontaneous regression occurred allowing the tooth to emerge without any complication (2, 4). However, in symptomatic situations such as unaesthetic problems, pain, infection, trauma, bleeding, or decayed tooth eruption, the surgical approach of excision or incision and draining its content may be recommended (2,

3). However, other modalities such as laser therapy with some advantages have been proposed as well (3, 4).

CONCLUSION

Mostly, eruption hematoma disappears spontaneously such that clinicians only follow the conservative approach of wait and watch.

REFERENCES

1. Bodner L, Goldstein J, Sarnat H. Eruption cysts: a clinical report of 24 new cases. *J Clin Pediatr Dent*. 2005;28(2):183-6.
2. Şen-Tunç E, Açıkel H, Şaroğlu-Sönmez I, Bayrak Ş, Tüloğlu N. Eruption cysts: A series of 66 cases with clinical features. *Med Oral Patol Oral Cir Bucal*. 2017;22(2):e228.
3. Boj J, Poirier C, Espasa E, Hernandez M, Jacobson B. Eruption cyst treated with a laser powered hydrokinetic system. *J Clin Pediatr Dent*. 2006;30(3):199-202.
4. Nagaveni N, Umashankara K, Radhika N, Satisha TM. Eruption cyst: A literature review and four case reports. *Indian J Dent Res*. 2011;22(1):148.
5. Marques A, Alencar N, Maia L, Antonio A. Quality of Life related to Eruption Hematoma in a Twenty Months Old Infant. *The journal of contemporary dental practice*. 2015;16(9):763-7.
6. Ricci HA, Parisotto TM, Aparecida Giro EM, de Souza Costa CA, Hebling J. Eruption cysts in the neonate. *J Clin Pediatr Dent*. 2008;32(3):243-6.
7. Jain P, Rathee M. *Anatomy, Head and Neck, Tooth Eruption*. StatPearls. Treasure Island (FL): StatPearls Publishing LLC.; 2019.
8. Dhawan P, Kochhar GK, Chachra S, Advani S. Eruption cysts: A series of two cases. *Dent Res J (Isfahan)*. 2012;9(5):647.