

The Interventions of Infantile Hemangioma and its Influence on the Development of Child

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ABSTRACT

Infantile Hemangioma (IH) is the most frequent vascular tumor of infancy with unclear pathogenesis; disordered angiogenesis is considered to be involved in its formation and also known as strawberry mark or strawberry hemangioma, is a common vascular tumor that appears during infancy. While it may sound alarming to parents, it's essential to understand that infantile hemangioma is typically harmless and tends to regress over time. However, its presence can raise concerns and prompt questions about its causes, symptoms and treatment options. In this study, we will discuss about the infantile hemangioma, shedding light on its characteristics, possible causes, symptoms and available treatments.

Keywords: Infantile Hemangioma (IH); Ulceration; Laser therapy; Psychological distress

DESCRIPTION

Infantile Hemangiomas (IHs) are the most common benign soft-tissue tumors in infancy; about 10%–15% of them may result in various complications that require active management. The current first-line treatment for IH is oral propranolol.

Infantile hemangioma

Infantile hemangioma is a noncancerous growth of blood vessels that typically appears in the first few weeks or months of life. It is the most common benign tumor of infancy, affecting approximately 4-5% of infants, with a higher prevalence among females and premature babies. While the exact cause of infantile hemangioma remains unclear, researchers believe that it involves abnormal growth of blood vessels during fetal development [1].

Characteristics of infantile hemangioma

Infantile hemangiomas can vary significantly in appearance, size and location. They commonly present as raised, red or pinkish patches on the skin, resembling a strawberry, hence the term "strawberry mark." These lesions may grow rapidly during the first few months of life, reaching their peak size by around 6-9 months. Afterward, they typically enter a phase of gradual

regression, during which the color fades and the lesion flattens and shrinks. Most infantile hemangiomas resolve completely by age 5-7, although residual skin changes such as faint discoloration or texture irregularities may persist.

Symptoms of epilepsy

Infantile hemangiomas may not cause any symptoms other than their characteristic appearance. However, certain factors may warrant medical attention, including:

Ulceration: In some cases, the surface of the hemangioma may break down, leading to the formation of an open sore or ulcer. This can increase the risk of infection and may cause pain or discomfort for the infant [2].

Functional impairment: Depending on the size and location of the hemangioma, it may interfere with normal bodily functions. For example, a hemangioma near the eye or mouth may obstruct vision or feeding, respectively [3].

Psychological distress: While infantile hemangiomas are benign, their conspicuous appearance may cause emotional distress for both parents and affected children, particularly if the lesion is large or located in a prominent area.

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Diagnosis of infantile hemangioma

Infantile hemangiomas are typically diagnosed based on their characteristic appearance and clinical history. In some cases, additional tests such as ultrasound or Magnetic Resonance Imaging (MRI) may be performed to assess the extent of deeper tissue involvement or to rule out other conditions. If there is uncertainty regarding the diagnosis or if complications are suspected, a biopsy may be recommended [4].

Treatment and management

The management of infantile hemangioma depends on various factors, including the size, location and potential complications associated with the lesion. Treatment options may include:

Observation: Many infantile hemangiomas do not require intervention and may resolve spontaneously over time. In such cases, regular monitoring by a healthcare provider is recommended to track the progression of the lesion and address any concerns that may arise [5].

Topical therapies: For small, superficial hemangiomas, topical medications such as timolol (a beta-blocker) or corticosteroids may be applied to promote regression of the lesion.

Oral medications: In cases where the hemangioma is large or causing significant symptoms, oral medications such as propranolol (a beta-blocker) or corticosteroids may be prescribed to facilitate regression and minimize complications [6].

Laser therapy: Laser treatment can be effective in reducing the size and color of infantile hemangiomas, particularly those located on the skin's surface.

Surgical intervention: In rare instances where infantile hemangiomas are large, deep-seated or causing severe functional impairment, surgical excision may be considered. However, surgery is typically reserved for cases where other treatment modalities have been ineffective or inappropriate. It's important to note that the decision to initiate treatment for infantile hemangioma should be made in consultation with a pediatrician or pediatric dermatologist, taking into account the individual characteristics and needs of the child [7].

CONCLUSION

Infantile hemangioma is a common vascular tumor that affects infants during the first months of life. While it can be concerning for parents, it's essential to recognize that most infantile hemangiomas are benign and tend to resolve spontaneously over time. However, certain cases may require medical intervention to prevent complications or address functional impairment. By understanding the causes, symptoms and treatment options for infantile hemangioma, parents and healthcare providers can work together to ensure optimal management and outcomes for affected infants. Regular monitoring and timely intervention, when necessary, are key to managing this condition effectively and minimizing its impact on the child's well-being.

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