

Supernumerary Nipples

Supernumerary nipples, also known as accessory nipples, are relatively common congenital anomalies characterized by the presence of additional nipples beyond the typical two. These extra nipples are present from birth and can vary in number, appearance, and location. Typically, they are found along the milk line, an anatomical line extending from the axilla to the groin, and can appear as small, brown to pink papules or structures resembling the areola. While usually benign, supernumerary nipples can present with complications in certain cases and may require medical attention depending on associated symptoms or cosmetic concerns.

Epidemiology and Pathophysiology

Supernumerary nipples are estimated to affect approximately 1-5% of the general population, with some studies suggesting a higher prevalence in males compared to females. These extra nipples are the result of an abnormality during embryogenesis when there is incomplete regression of the mammary ridge or milk line, which is the precursor for breast development. Supernumerary nipples can occur unilaterally or bilaterally and may range from a single extra nipple to multiple, presenting either as isolated or as part of a broader congenital condition (e.g., Polydactyly, or Cleidocranial dysplasia).

Clinical Presentation

Supernumerary nipples generally present as small, papular, or areolar-like structures along the milk line. They can range in color from pink to brown and may have a similar appearance to moles, cysts, or skin tags, which can lead to misdiagnosis. In some cases, if there is underlying glandular tissue, these additional nipples may enlarge during puberty, becoming tender premenstrually and potentially undergoing lactation postpartum. During puberty, some supernumerary nipples may also develop hair. Although most cases are asymptomatic and require no intervention, these extra nipples may cause cosmetic distress or discomfort in certain individuals.

Diagnosis

Diagnosis of supernumerary nipples is typically made through a physical examination, where the healthcare provider will assess the location, appearance, and number of extra nipples. In cases where there is concern for underlying breast tissue or the presence of glandular structures, further imaging investigations may be warranted. These can include ultrasound or mammography, particularly if there is suspicion of functional breast tissue or associated abnormalities, such as polythelia (extra breast tissue) or associated malformations.

Histopathological examination via biopsy can provide a definitive diagnosis. On biopsy, supernumerary nipples generally exhibit histological features resembling those of a normal nipple, including epidermal thickening, mild papillomatosis, basal hyperpigmentation, pilosebaceous structures, smooth muscle, and potentially even breast ducts or glandular tissue. These characteristics differentiate supernumerary nipples from other dermal lesions, such as moles, cysts, or skin tags, that may mimic their appearance.

Treatment

In most cases, supernumerary nipples do not require treatment unless they cause physical discomfort, such as tenderness or irritation, or cosmetic concerns. Management approaches may vary depending on the individual's symptoms and preferences. Treatment options include:

- **Conservative Management:** If the supernumerary nipples are asymptomatic and do not cause distress, no treatment is typically necessary. Regular monitoring may be recommended, especially if the individual has associated conditions like polythelia.
- **Surgical Removal:** If the extra nipples cause cosmetic concerns or discomfort, surgical excision is a common option. The procedure is typically performed under local anesthesia and involves the removal of the extra tissue. The surgical approach depends on the size, location, and structure of the extra nipple. Healing is usually uncomplicated, and recurrence is rare.
- **Cosmetic Procedures:** Although not typical, individuals may opt for non-invasive procedures, such as cryotherapy or laser therapy, to reduce the visibility of supernumerary nipples, particularly when they are small and located in easily concealed areas.

Prognosis

Supernumerary nipples are generally benign and do not lead to significant health complications. However, when glandular tissue is present, they may enlarge during puberty, and in rare cases, functional lactation can occur. Despite the low risk for malignancy, individuals with supernumerary nipples should be aware of the potential for associated conditions or changes in the size or appearance of the extra nipples and seek medical advice if any unusual symptoms arise.

Conclusion

Supernumerary nipples are a common congenital condition that can present in a variety of ways. While typically harmless, they may cause cosmetic distress or discomfort, particularly when associated with underlying glandular tissue. Diagnosis is generally made through a thorough physical examination, and histopathology can confirm the presence of normal nipple-like structures. Treatment is usually unnecessary unless the individual experiences physical or cosmetic concerns, with surgical removal being the most common intervention. Regular monitoring and consultation with a healthcare professional are essential for ensuring appropriate management based on individual circumstances.

References

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