OASIS DERMATOLOGY GROUP

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Cysts

Cysts are closed sacs or cavities that can form within the body, characterized by a membrane lining that distinguishes them from other types of lesions. In dermatology, cysts are commonly classified based on their location, composition, and structure. Among the most frequently encountered skin cysts are epidermal (sebaceous) cysts, trichilemmal (pilar) cysts, and milium. Less common cysts, such as dermoid cysts and ganglion cysts, also occur but are not as prevalent.

Epidermal Cysts

Epidermal cysts, also known as sebaceous cysts, are one of the most prevalent benign skin tumors. These cysts are typically mobile nodules with normal-appearing overlying skin, though a central pore may be visible. The cyst wall is composed of epidermal tissue—the outermost layer of the skin. Common locations for epidermal cysts include the face, ears, neck, back, and scalp. The cysts contain a whitish, cheese-like substance composed of keratin, which is the protein that forms the outer layer of the skin.

Epidermal cysts typically arise due to the blockage of hair follicles or sebaceous glands. This can occur secondary to conditions such as severe acne or trauma, which may cause a disruption in the normal flow of sebum and keratin. While these cysts are benign, they may become painful, inflamed, or infected, prompting individuals to seek medical attention.

Trichilemmal Cysts (Pilar Cysts)

Trichilemmal cysts, often referred to as wens, share many similarities with epidermal cysts but typically occur on the scalp and tend to present as multiple cysts. These cysts have a thicker wall compared to epidermal cysts, which facilitates easier removal in a single, intact piece. This is in contrast to epidermal cysts, which may rupture during removal, increasing the risk of recurrence if fragments of the cyst wall are left behind. The treatment of trichilemmal cysts is generally surgical excision, and recurrence is rare when complete removal is achieved.

Milia

Milia are small, firm, white cysts commonly found on the face, particularly around the eyes and on the cheeks. These cysts are composed of keratin and are often triggered by no clear external cause, although certain dermatologic treatments, such as topical steroids or excessive sun exposure, may contribute to their formation. Milia are also frequently seen in newborns, where they resolve spontaneously within a few weeks to months. In adults, milia may be removed for cosmetic reasons, typically via extraction with a sterile needle or minor surgical incision.

Treatment Options

While many skin cysts are benign and require no treatment unless symptomatic, management strategies are available when cysts cause discomfort, infection, or cosmetic concerns. Treatment options include:

- ***Surgical Excision***: The most definitive treatment for problematic epidermal and trichilemmal cysts is surgical excision. This procedure involves removing the cyst and its entire wall to prevent recurrence. In the case of trichilemmal cysts, this can usually be done in one piece due to the thicker wall structure, reducing the likelihood of regrowth. Excision is typically performed under local anesthesia.
- ***Drainage and Aspiration***: For cysts that are inflamed or infected, draining the cyst may provide relief. This approach is often used as a temporary measure, as the cyst may recur if the entire cyst wall is not removed.
- ***Topical Treatments for Milia***: In cases of milia, especially in infants, no intervention is necessary as the cysts will often resolve on their own. In adults, milia may be treated with topical retinoids to promote skin turnover and prevent new cyst formation. However, if milia are persistent, they can be removed through minor surgical procedures or through extraction with a sterile needle.
- ***Laser Therapy***: In some cases, laser therapy, including CO2 laser or electrosurgery, may be used to treat larger cysts or to improve the cosmetic appearance of the skin after cyst removal.
- ***Antibiotics***: In the case of infected cysts, such as those caused by epidermal cysts, oral or topical antibiotics may be prescribed to prevent further infection.

Conclusion

While most skin cysts are benign and asymptomatic, they can lead to discomfort, infections, or cosmetic concerns. The treatment approach typically involves surgical removal, especially for larger or recurring cysts. For milia, particularly in infants, no treatment is needed, as they resolve on their own. In adults, extraction or topical therapies may be employed to address cosmetic concerns. Understanding the etiology and management options for these common cysts helps ensure effective and timely care.

References

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