

Sebaceous Cyst

Sebaceous cysts, better known as epidermoid cysts or epidermal inclusion cysts, are common benign growths that arise from the sebaceous glands or hair follicles. These cysts are typically filled with keratin, a protein found in skin cells, and are encapsulated within a sac. While sebaceous cysts are generally not harmful, they can become inflamed or infected, leading to discomfort and the need for medical intervention. Sebaceous cysts most frequently occur on the face, neck, and upper torso, but they can form anywhere on the body.

Pathophysiology and Etiology

Sebaceous cysts typically develop when a hair follicle or sebaceous gland becomes obstructed, leading to the accumulation of sebum and keratin. These cysts are often associated with epidermal inclusion, where the skin cells that normally exfoliate instead become trapped beneath the surface. The blockage causes a buildup of keratin and sebum, forming a visible, soft, and movable lump. Although sebaceous cysts are usually benign, they can occasionally become infected, resulting in inflammation, pain, and the formation of pus.

In rare cases, sebaceous cysts can result from genetic conditions such as Gardner's syndrome, which is characterized by multiple cysts along with other growths, including osteomas and fibromas.

Clinical Presentation

Sebaceous cysts present as painless, round nodules beneath the skin, typically ranging from 1 to 5 cm in diameter. The overlying skin may appear normal or slightly discolored. These cysts are typically mobile and have a characteristic pore or opening in the center, which may discharge a thick, yellowish, cheesy material if squeezed. The cysts can range in size from small, barely noticeable bumps to larger, more conspicuous lesions.

In some cases, sebaceous cysts may become inflamed or infected, resulting in redness, swelling, tenderness, and the formation of pus. Infection may require medical attention, and the cyst may become more painful and may drain spontaneously.

Diagnosis

The diagnosis of a sebaceous cyst is primarily clinical, based on its typical appearance and location. However, in cases where there is doubt or unusual presentation, imaging studies such as ultrasound or CT scans may be used to rule out other possible conditions, such as lipomas or

infected abscesses. If there is concern about malignancy or if the cyst has an atypical presentation, a biopsy or histopathological examination may be performed. The biopsy will confirm the diagnosis of an epidermoid cyst by revealing the presence of keratin within the cyst sac.

Treatment Options

➤ **Conservative Management:**

For most sebaceous cysts, no treatment is required unless the cyst becomes symptomatic (i.e., inflamed, infected, or large). In many cases, watchful waiting is an appropriate approach, especially for asymptomatic cysts. If the cyst does not cause discomfort or cosmetic concerns, it may be left untreated.

➤ **Incision and Drainage (I&D):**

If a sebaceous cyst becomes infected or inflamed, incision and drainage (I&D) may be performed. This procedure involves making a small incision in the cyst and allowing the pus or keratin to drain. While I&D can provide relief, it is not a definitive treatment. The cyst may recur if the cyst wall (which contains the keratin-producing cells) is not fully excised.

➤ **Excision:**

The most effective treatment for permanent removal of a sebaceous cyst is complete excision. This involves removing the entire cyst, including the sac, to prevent recurrence. Excision can be performed under local anesthesia, and the procedure is generally well-tolerated. A small incision is made, and the cyst is carefully dissected and removed. Excision is the treatment of choice for symptomatic cysts or those located in areas where they cause cosmetic concerns.

➤ **Laser Treatment:**

For small sebaceous cysts or for patients who prefer a non-invasive approach, laser therapy may be an option. CO2 laser treatment can be used to remove the cyst or to assist in drainage. Laser treatments have the advantage of potentially leaving minimal scarring compared to traditional excision, though they may not completely prevent recurrence.

➤ **Steroid Injections:**

In some cases, intralesional steroid injections may be used to reduce inflammation and promote the shrinking of the cyst, especially in cases where the cyst is inflamed but not infected. This method is less invasive than excision and may provide symptomatic relief, but it is not a cure for the cyst itself.

Complications and Recurrence

While sebaceous cysts are benign and typically not dangerous, complications may arise, particularly if the cyst becomes infected. Infected cysts can result in abscess formation, which may require additional drainage or antibiotics to resolve. Recurrence is also common, particularly if the cyst wall is not completely excised. Although complete removal minimizes the risk, some cysts may reappear even after surgery.

Conclusion

Sebaceous cysts are common, generally benign growths that arise from the blockage of hair follicles or sebaceous glands. While these cysts are typically asymptomatic, they can cause cosmetic concerns or become inflamed or infected, requiring medical intervention. Treatment options vary from conservative management to more invasive procedures such as excision or laser therapy, depending on the size, location, and symptoms of the cyst. With appropriate care, the majority of sebaceous cysts can be effectively managed, minimizing the risk of complications or recurrence.

References

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