

A Rare Case of Epidermoid Cyst: A Case Report

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Abstract

Case Presentation

This patient came into the clinic for a follow-up on the removal of an epidermoid cyst that was presenting on her head, this was a recurring cyst. The epidermoid cyst usually does not recur when they are surgically removed but, in this case, the cyst was removed in 2018 surgically and it had recurred in 2021, this time the cyst showed in a larger size. This cyst was also surgically removed and since the removal of the second cyst and follow-up debridement the patient is feeling better, and symptoms have been shown to resolve.

Discussion

The epidermoid cyst usually is self-contained, and they do not need any medical intervention. In some cases, the tissue underlying the cyst is seen to be severely inflamed, in these cases, the normal practice is to remove the cyst entirely. This excision is normally done at the base of the cyst and the wall of the capsule is especially important to remove or else the cyst has a chance to reform. Patients normally are not seen with epidermoid cysts due to the location of the cyst and the pain and severity of the infection.

Conclusion

The epidermoid cyst usually does not cause any major changes or pain to a patient they usually are self-contained, normally they resolve on their own. Surgical or medical intervention is only needed when a cyst is ruptured and causing pain and has some drainage to it. The base of the cyst and the surrounding walls are removed to stop the regrowth of another cyst, and this often resolves the problem the first time. The regrowth of a cyst is exceedingly rare but can happen as it happened in this patient.

Case Presentation

An 83-year-old female was present in the surgical outpatient clinic with an epidermoid cyst on her head; the patient presented with a similar epidermoid cyst in 2018 with symptoms of an abscess. The patient stated symptoms of pain, tenderness, warmth, redness, and pus on the top of her head. The patient described that these symptoms do not radiate to her face; they remain around the location of the cyst. The patient was diagnosed with an epidermoid cyst as well as an abscess. The patient was started on Keflex 500mg every six hours for seven days before the surgery to treat the abscess. After the excision of the cyst in 2018, the patient had several follow-up appointments in the outpatient surgery clinic for debridement and dressing of the wound. The pathology report following the excision of the scalp mass

indicated that it was a ruptured epidermal inclusion cyst with epidermal ulceration and tissue necrosis that included underlying cellulitis and abscess formation with prominent plasmacytic inflammatory cell infiltrate. In 2021, there was another recurrence of an epidermoid cyst on the scalp, she tried to clean the mass with hydrogen peroxide and Neosporin, but the mass only developed. The mass was excised in 2021 with Epifix Placement. The pathology report was negative for malignancy. The patient had multiple follow-up appointments for debridement and curettage of the wound. The patient was instructed to apply wet dressings and take multivitamins and Vitamin C for recuperation. The patient was also instructed to increase protein in her diet to promote healing.

Discussion

An epidermoid cyst is a benign cyst in the infundibulum or upper portion of the hair follicle; it is typically encapsulated in a thin epithelium layer that resembles the epidermis. The contents of the cysts usually are keratin and lipid-rich debris. These noncancerous lumps can appear anywhere on the skin but are most commonly seen on the head and neck also sometimes on the trunk. Epidermoid cysts typically grow slowly and are often painless. Hence, patients typically

do not seek treatment for them. The main reason patients may choose to have them removed is usually cosmetically. An epidermoid cyst can often resemble a sebaceous cyst, which is less commonly seen.

A sebaceous cyst comes from glands and secretes oily material. Causes of an epidermoid cyst can vary, but the common etiology is from the epidermis cells moving into the deeper layers of the skin and

starting to multiple instead of shed-like they are supposed to. The cyst can form from irritation or injury of the skin around the hair follicle. The epidermal cells that make the encapsulating wall state secrete a keratin substance into the interior. The keratin is thick and yellow; it can drain from the cyst at any time, the epidermal cell layered wall is disturbed in the capsule. Risk factors for epidermoid cysts consist mainly of trauma or injury to the skin and having certain rare genetic disorders; being past puberty is usually the demographic affected, as

Conclusion

Epidermoid cysts are most commonly benign which often do not require any treatment. They are slow-growing cysts that are often painless and rarely cancerous. These cysts occur due to the blockage of the hair follicle or pilosebaceous unit. Rupture of the contents of these cysts into the dermis can cause severe complications. The rupture of the cyst generally occurs due to trauma or a bacterial infection like *Staphylococcus Aureus* or *Escherichia Coli*. It is essential for those who have been infected to have a physician look at the cyst. Surgical incision drainage and debridement are conducted in cases of an epidermoid cyst complication. The recurrence of the

it rarely happens in pre-pubescent patients. Complications that can occur from an epidermoid cyst can include inflammation around the cyst; this can manifest in the forms of tenderness or being swollen around the cyst. Rupture is another complication that leads to an infection that must be treated urgently. Infection is usually the biggest concern with an epidermoid cyst that has ruptured. Cancer is also a rare complication of epidermoid cysts from the vast amount of inflammation and damage to cells that an epidermoid cyst can cause.

epidermoid cyst is rare, such as in this patient's case. This patient had suffered from a recurrence of the epidermoid cyst with symptoms of a painful abscess each time. The treatment of choice for epidermoid cyst is a surgical intervention that involves excision of the epidermoid cysts as soon as possible to avoid serious adverse effects. Both procedures were successfully conducted to excise the epidermoid cyst in this patient's case. The patient had many follow-up appointments to ensure the wound was treated and debrided so that the wound is not reinfected.



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