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#### **EPIDERMAL NEVUS OF THE SCALP**



# What is an epidermal nevus?

- An epidermal nevus is a type of growth which represents an overgrowth of cells of the epidermis.
- Most of these are present at birth, but can also develop in early childhood
- Epidermal nevi of the scalp are uncommon but do occur
- They are thought to occur in 1:1000 births and are thought to arise from new mutations in the skin in a localized area

## What are the other names used for an epidermal nevus?

- These may also be referred to as
  - 1. Linear epidermal nevus
  - 2. Verrucous epidermal nevus
  - 3. Keratinocyte epidermal nevus

### How do epidermal nevi change over time?

- Epidermal nevi may be relatively flat at birth but can enlarge over time to become more raised and warty in appearance.
- Epidermal nevi can darken and thicken over time, especially around puberty

## Are there any health concerns to having an epidermal nevus?

- Many patients with scalp epidermal nevi are healthy.
- However, Dr. Donovan will enquire about your past medical history and any changes/abnormalities detected in the brain, skeletal system or eyes that could suggest an epidermal nevus syndrome.
- Most nevi are not concerning. Scalp nevi may occasionally get caught in a brush or comb and therefore bleed.
- We recommend having epidermal nevi monitored every few years. Rare cases of basal cell carcinoma and squamous cell carcinoma arising within epidermal nevi have been reported in older individuals.
- Dr. Donovan recommends photographing all nevi periodically throughout one's life.

#### What is the treatment for an epidermal nevus of the scalp?

# 1. Full-thickness excision

Risk of Recurrence: LOW

Surgical excision is the best definitive treatment for small lesions, but may not be an option for large or extensive lesions, due to the risk of disfiguring scarring. This method gives the best long term chance of removal with the lowest chances of recurrence. The risk of recurrence is not zero, but close to it. It may also allow the best cosmetic result since only a small Is is typically seen rather than a bare area.

# Treatment Options for an epidermal nevus of the scalp (Continued)

# 2. Shave excision

Risk of Recurrence: LOW-MODERATE

Shave excision involves freezing the area with local anesthetics and then shaving off the top portion of the nevus. The bottom of the nevus is then burned with cautery in a repeated manner with hopes to prevent it from coming back (recurring). Even with this technique, recurrence is possible.

# 3. Cryotherapy

Risk of Recurrence: MODERATE

Cryotherapy refers to a technique whereby the area is frozen. This can help may patients however it does tend to have a high risk of recurrence. One must keep in mind that for the scalp, there will be no hair follicles underneath so the result of removing the lesion is often a bare area.

# 4. Laser ablation

Risk of Recurrence: LOW-MODERATE

A variety of destructive lasers can be used. Erbium:yttrium aluminum garnet (Er:YAG) laser ablation and CO<sub>2</sub> lasers are also possible. However, recurrence is possible.

