

## Hair Loss (Alopecia)

### Normal Hair

Hair is made of modified keratin. Hair growth is not constant but has three phases;

1. a growth phase (anagen) which lasts two to five years, when the hair grows at about 1cm each month. About 90% of our hairs are in this phase.
2. a two week phase (catagen) where the hair bulb changes and stops growing.
3. a resting phase (telogen) where the hair is pushed up out of the skin and lasts three months. About 10% of hairs will be in this phase.

The scalp has between 100,000 and 150,000 hairs with about 100 being shed each day.

### Types of hair loss

Alopecia can either be of the scarring or non-scarring types.

**Scarring** alopecia is due to inflammation damaging the hair follicles. It is associated with skin diseases such as lichen planus, discoid lupus, certain skin tumours (Squamous cell carcinoma) or following trauma (burns, radiotherapy or shingles). Hair loss will be permanent, so **refer early**.

**Non-scarring** hair loss is either localised (discrete bald areas) or more diffuse.

**Localised** alopecia may be due to;

**1. Female pattern baldness** with thinning of the vertex -there is little evidence that treatment is successful

#### **2. Alopecia areata**

Autoimmune.

Most patients' hair will regrow. Look for exclamation mark hairs at the margin of the bald patch. When hair regrows it will be white or grey but will re-pigment with time. Hair usually regrows without treatment. There is little evidence that treatment alters the natural history of the condition. There is poor quality evidence that potent topical steroids can be tried. If hair loss is significant, refer. Patients may be offered intralesional steroid injections or skin sensitisation with diphencyprone.

South Tees no longer offers diphencyprone, but it is offered in York & Whitby.

#### **3. Mechanical causes**

Hair is damaged by traction, breaks off and apparently bald patches appear. Close examination shows that there is hair but it is very short and damaged.

Traction alopecia occurs in the forehead hair line and results from the hair being pulled back too tightly when tied up.

Trichotillomania develops as areas of damaged hair due to it being twisted around the patient's fingers and pulled.

#### **4. Tinea capitis**

Pluck hairs and send scrapings for mycology. Always use oral treatment such as terbinafine, though unlicensed in children, but is mentioned in the paediatric BNF. Griseofulvin is licensed but treatment takes a lot longer.

Though not seen often a Kerion is an abscess caused by a fungal infection and often occurs on the scalp. It may be misdiagnosed as a bacterial infection. It is a boggy pus filled lump with localised hair loss.

**Diffuse** baldness is due to:

**1. Telogen effluvium**

During pregnancy or during a severe illness the hairs all change to the telogen phase of the hair cycle instead of being in different phases. Three months after pregnancy or the severe illness there is considerable hair loss. Following this the hairs revert to anagen and hair growth is restored and the normal hair cycle re-established.

**2. Anagen Effluvium –chemotherapy**

**3. Aging**

Hair density gradually decreases with age and the hair becomes finer. If this type of alopecia occurs in younger patients then check TFTs, FBC, serum ferritin & iron.

Wigs are an effective way of disguising baldness. Wearing a wig will not inhibit hair regrowth.