

Central Centrifugal Cicatricial Alopecia (CCCA)

Also known as: Hot comb alopecia, follicular degeneration syndrome, pseudopelade of the central scalp, pseudopelade in African Americans

What is Central centrifugal cicatricial alopecia?

Central centrifugal cicatricial alopecia (CCCA) is a chronic and progressive type of scarring alopecia that results in permanent hair loss. CCCA most commonly starts in the centre of the scalp and, without treatment, expands over time causing an area of baldness. It is most commonly seen in middle-aged African women.

What causes CCCA?

Genetic factors and several hair care practices have been suggested as causes of CCCA. These include: excessive heat (hot combs/hair straighteners, hair dryers and curling irons); traction (tight braids/cornrows, weaves, tight ponytails or hair extensions that pull on the hair); and use of chemical relaxers (especially lye relaxers).

What does CCCA look like?

Women of African ancestry are most commonly affected. CCCA only affects the scalp. CCCA may cause tenderness, pain, tingling, burning, “pins and needles” or itching of the scalp. Sometimes there are no symptoms other than an area of hair loss.

Crusts, pimples and scale may also be present in some cases and the scalp may feel soft or ‘boggy’ when touched. In most cases, there is a bald patch with shiny skin (scarring) seen in the centre of the scalp. Traction alopecia (loss of hair in areas of high tension) or hair breakage is also a feature.

The bald patch starts in the central part of the scalp (vertex or crown) and gradually expands outwards symmetrically (centrifugal). It may progress slowly (over decades) or rapidly (over years) resulting in patches of permanent hair loss (baldness).

How is CCCA diagnosed?

Early correct diagnosis is important so that treatment can be started to prevent further permanent hair loss. A skin biopsy of the affected area of scalp will show the presence of inflammatory cells around the hair follicles, loss of the sebaceous glands (oil glands) and premature damage of the hair follicle.

Skin scrapings and swabs may be required if scale, crust and/or pimples are present to exclude the possibility of fungal or bacterial infections.

How is CCCA treated?

At present there is no consistently successful treatment for CCCA.

Treatment is aimed at improving symptoms and stopping further hair loss. Once the hair has been lost, it is almost impossible to regrow.

Treatment of CCCA involves changing grooming practices and avoiding:

- Excessive heat (hot combs/hair straighteners, hair dryers and curling irons)
- Traction (tight braids/cornrows, weaves, ponytails, hair extensions)
- Chemical relaxers (especially lye relaxers).

Injections and strong steroid creams are commonly used.

A variety of anti-inflammatory topical and/or oral medications are used with variable success.

Cosmetic camouflage (e.g. wigs) and hair transplantation may be an option for people who have significant bald patches seen in the advanced stages of CCCA.

What is the prognosis/ likely outcome of CCCA?

Without early treatment, CCCA is likely to progress over years eventually causing severe, non-reversible scarring and permanent hair loss (bald patches).