S023- Hair and Scalp Dermoscopy

Hair casts

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DISCLOSURE OF RELATIONSHIPS WITH INDUSTRY

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S023 - I do not have any relevant relationship with industry
• Presence of concretions on the hair shaft is concerning for patients and physicians as the most common cause are nits, a sign of lice infection

• Some cosmetics may resemble casts

*How to distinguish casts, pseudocasts and nits?*
Casts

- Peripilar keratin casts or pseudonits
- Small movable cylindrical or nodular white-yellowish masses
- Formed by hyperkeratotic/parakeratotic cells from outer root sheath, that surround the hair shafts
Inflammatory conditions associated with "true" casts

• Seborrheic dermatitis
• Psoriasis
• Pityriasis amiantacea
• Folliculitis decalvans
• Lichen planopilaris
• Frontal fibrosing alopecia
• Pemphigus vulgaris
• others...
Casts
Folliculitis decalvans

Casts in traction alopecia

• As a result of extraction of the root sheaths from excessive tension
Nits

• Tiny, oval shape structures that attach to the shaft but do not encircle it

• Sign of *pediculosis capitis*
White piedra

• Rare fungal infection (*Trichosporon spp*)

• Multiple whitish, or brown soft masses of fungal cells firmly attached to the hair shaft
## True casts versus nits

<table>
<thead>
<tr>
<th>True casts</th>
<th>Nits</th>
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<tbody>
<tr>
<td>• Firm, shiny, white, freely movable cylindrical concretions that encircle the hair shaft</td>
<td>• Tiny yellow or brown that attach to the hair shaft, near to the scalp</td>
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<tr>
<td>• Many causes</td>
<td>• Caused by <em>Pediculosis capitis</em> female parasite that lays eggs at base of hair</td>
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<td>• Most common in adults</td>
<td>• Most common in children of all ages</td>
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<tr>
<td>• Not contagious</td>
<td>• Itchy scalp</td>
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<td>• Usually asymptomatic</td>
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</table>
Pseudocasts

• Caused by cosmetics as hair sprays, deodorants, and dry shampoos

• Irregular shaped concretions with variable length, thickness, and surface irregularly attached to the hair shafts
Pseudocasts
Hair spray

Trichorrhexis nodosa

• Can mimic casts

• Small white nodes at irregular intervals along the hair shaft followed by breakage of the hair. Usually caused by physical or chemical trauma

• Acquired or congenital
Take home message

• Even though casts and pseudocasts are benign, they can be barely recognized and may generate anxiety and unnecessary treatments.

• Trichoscopy is a noninvasive and practical diagnostic tool that helps to quick distinguish casts, pseudocasts and nits.

• May be useful in assessing the activity of some diseases, the response of medical treatments, quick screening of family members and post therapeutic follow-up.