

Dandruff



Non-Prescription Drugs and Parapharmaceuticals

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Dandruff

- **Dandruff, seborrheic dermatitis, and psoriasis are chronic scaly dermatosis.**
- Dandruff is characterized with fine scaling confined to the scalp
- Dandruff is a harmless, condition that occurs when the scalp becomes dry or greasy and produces white flakes of that appear in the hair or on the shoulders..
- A chronic relapsing condition responds to treatment but often returns when treatment is stopped.

Dandruff

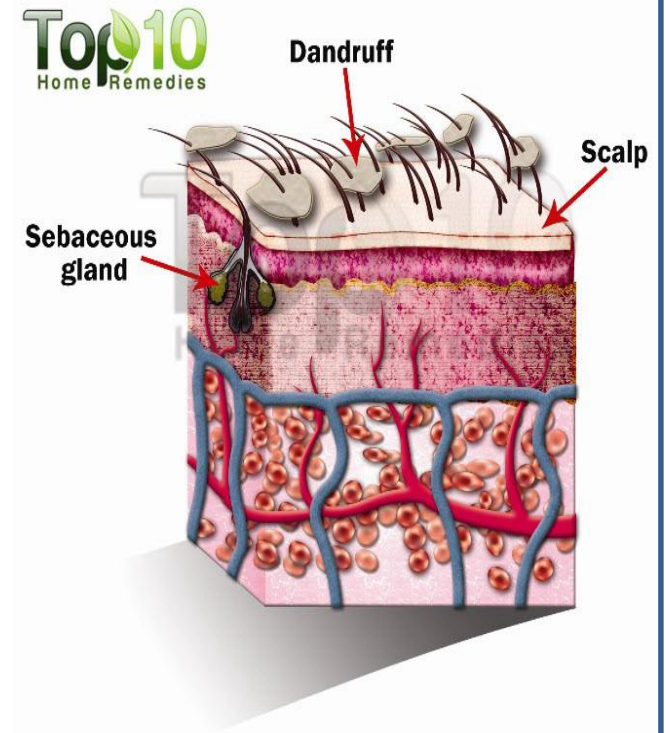
- Appears during puberty and reaches a peak in early adulthood.
- Dandruff is rarely serious, it can be embarrassing and sometimes difficult to treat.



What you need to know- Appearance

- Dandruff is characterised by greyish-white flakes or scales on the scalp and an itchy scalp as a result of excessive scaling.

Epidermal cells are formed continuously on the scalp, so the shedding of dead epidermal cells is a normal process. **With dandruff, however, epidermal cells are shed at a faster rate than normal.** Oil from the scalp causes the skin cells to clump together and appear as white flakes.

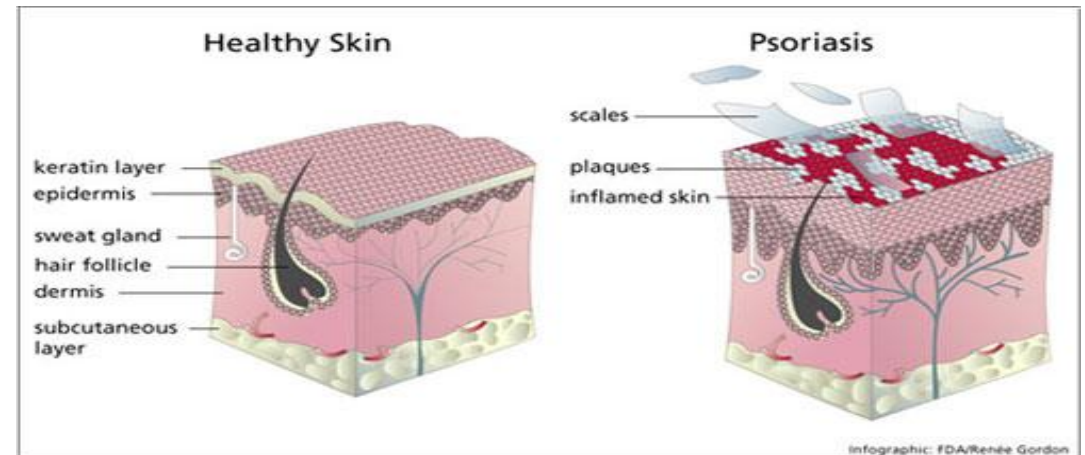


Causes

- **Dry skin.** Simple dry skin is the most common cause of dandruff.
- **Irritated, oily skin (seborrheic dermatitis).** This condition, one of the most frequent causes of dandruff, is marked by red, greasy skin covered with flaky white or yellow scales.
- **Not shampooing often enough.** If you don't regularly wash your hair, oils and skin cells from your scalp can build up, causing dandruff.

Causes

- **Other skin conditions.** People with skin conditions such as eczema or psoriasis —may appear to have dandruff.
- **A yeast-like fungus (malassezia).** It lives on the scalps of most adults, but for some, it irritates the scalp.
- **Sensitivity to hair care products (contact dermatitis).** Sensitivities to certain ingredients in hair care products or hair dyes, can cause a red, itchy, scaly scalp. Shampooing too often or using too many styling products also may irritate your scalp, causing dandruff.



Risk Factors

- **Age.** Dandruff usually begins in young adulthood and continues through middle age.
- **Hormonal factors.** Increased sebaceous gland action (over-activity) at the time of puberty or Young adults with increased androgen levels.
- **Oily hair and scalp.** Fungi feed on oils in your scalp. Therefore, having excessively oily skin and hair makes you more prone to dandruff.

Risk Factors

- **Poor diet.** If your diet lacks B vitamins, you may be more likely to have dandruff.
- **Certain illnesses.** Adults with depression, are more likely to develop seborrheic dermatitis and dandruff. people with HIV infection and those with stressful conditions, particularly heart attack and stroke, and those with compromised immune systems.

What you need to know- Severity

- Dandruff is generally a **mild condition**. However, the itching scalp may lead to scratching, which may break the skin, causing soreness and the possibility of infection. If the scalp is very sore or there are signs of infection (crusting) referral would be indicated.

- **When to refer**

Suspected psoriasis

Severe cases: seborrhoeic dermatitis

Signs of infection

Unresponsive to appropriate treatment.

- **Treatment timescale**

Dandruff should start to improve within 1 to 2 weeks of beginning treatment.

- **Arriving at a differential diagnosis**
- Most patients will diagnose and treat dandruff without seeking medical help. However, for those patients who do ask for help and advice, it is important to differentiate dandruff from other scalp conditions.
- Asking symptom-specific questions will help the pharmacist determine whether referral is needed



Table 8.8
Specific questions to ask the patient:
Dandruff

Question	Relevance
Presence of erythema	Dandruff is not associated with scalp redness unless the person has been scratching. Redness is characteristic of psoriasis and is common in adult seborrhoeic dermatitis.
Itch	Dandruff tends to cause itching of the scalp, unlike psoriasis and seborrhoeic dermatitis.
Presence of other skin lesions	An adult with only scalp involvement is likely to have dandruff, especially in the absence of erythema. Many patients who have scalp psoriasis also have plaque psoriasis affecting the arms, legs and back.

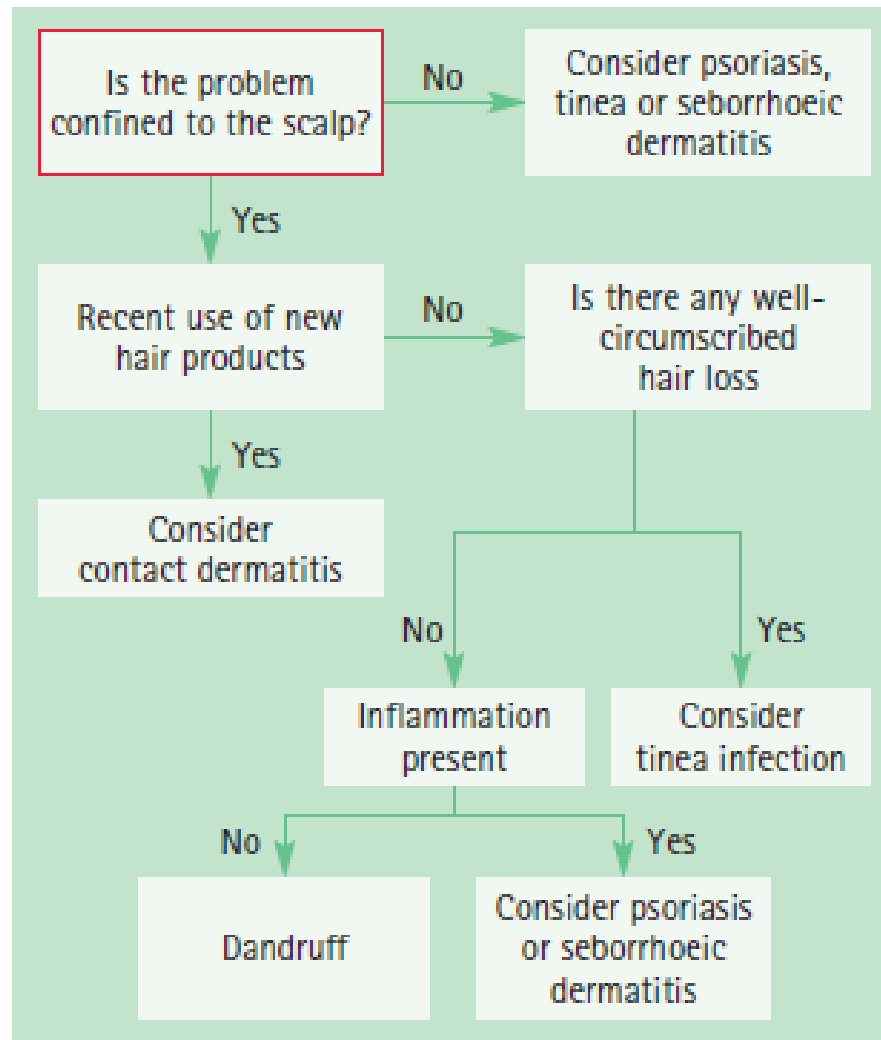


Fig. 8.8 Primer for differential diagnosis of dandruff.

Treatment goals

- Reduce epidermal turnover rate of the scalp
- Minimize the cosmetic embarrassment
- Minimize itch.

- Mild to moderate cases: frequent hair washing is sufficient
- Otherwise, medicated shampoos can be used

Treatment

1. Follow a Healthy Diet

It is vital to nourish your body with nutritious food to maintain good health of your organs and body parts, including hair. Nourish your hair with foods rich with good omega-3 fatty acids, B vitamins and zinc.



Treatment

2-Avoid Stress

Stress is known to be the major cause of dandruff.



Medications

- It is important to identify what has been tried and how it was used.
- If an appropriate treatment has been correctly used with no improvement, referral should be considered.
- **Shampoos use a combination of special ingredients to control dandruff**

Treatments

- Dandruff Shampoo

Salicylic Acid
• Ionil T

Selenium Sulfide
• Selsun Blue

Tar Shampoo
• Neutrogena
• T/Gel

Ketoconazole
• Nizoral

Zinc Pyrithione
• Head & Shoulders
• Selsun Salon



Ketoconazole

- Ketoconazole 2% shampoo is used twice a week for 2–4 weeks, after which usage should be reduced to weekly or fortnightly as needed to prevent recurrence.
- It is considered the first line in **moderate-to-severe dandruff**.
- Ketoconazole is not absorbed through the scalp and side effects are extremely rare. occasional cases of allergic reactions have been reported.



Zinc pyrithione shampoos

*As Head & Shoulders, Jason
Dandruff Relief 2 in 1.*

- It has fungistatic and bacteriostatic properties and is used in the treatment of dandruff and seborrhoeic dermatitis.
- It should be used twice weekly for the first 2 weeks and then once weekly as required.



Selenium sulphide 2.5%

- **As Selsun Blue**
- Twice-weekly use for the first 2 weeks is followed by weekly use for the next 2 weeks; then it can be used as needed.
- The hair should be thoroughly wet before applying the shampoo and left in contact with the scalp for 2 to 3 minutes before rinsing out. It may cause a burning sensation if left on for longer.
- The hair and scalp should be thoroughly rinsed after using *selenium sulphide shampoo*; otherwise, discoloration of blond, grey or dyed hair can result

HINTS AND TIPS BOX 8.2: DANDRUFF

Selsun
shampoo

Gold, silver, and other metallic jewellery should be removed before use because they can be discoloured. It also has an odour that some may find unpleasant.



Coal tar

- **Tar-based shampoos (such as Neutrogena T/Gel).**
- Coal tar, helps conditions such as dandruff, seborrheic dermatitis by slowing how quickly skin cells on your scalp die and flake off.
- coal tar is the least effective of the agents for seborrheic dermatitis. It may be useful in dandruff.
- Coal tar can cause skin sensitisation





Table 8.9
Practical prescribing: Summary of medicines for dandruff

Name of medicine	Use in children	Very common ($\geq 1/10$) or common ($\geq 1/100$) side effects	Drug interactions of note	Patients in whom care is exercised	Pregnancy and breastfeeding
Coal tar products	All ages	Local irritation and dermatitis reported but rare	None	None	OK
Selenium	>5 years				Manufacturers state to avoid in pregnancy and while breastfeeding due to lack of safety data. However, safety data show it to be OK when used on small areas over a limited time; no evidence to say it would be absorbed into breast milk.
Zinc pyrithione	All ages				OK
Ketoconazole	All ages				

Practical points

- All antidandruff shampoos can cause local scalp irritation. If this is severe, the product should be discontinued.

- ***Continuing treatment***

Patients need to understand that the treatment is unlikely to cure their dandruff permanently and that it will be sensible to use the treatment on a less frequent basis in the longer term.

- ***Treating the scalp***

It is the scalp that needs to be treated rather than the hair. The treatment should be applied to the scalp and massaged gently..