



Dandruff

Description

All of us have dandruff. It is a natural process, caused by the turnover and renewal of skin on the scalp (and elsewhere, for that matter). It becomes a cosmetic problem when shedding of old skin exceeds our ability to remove it, showing up as dry flakes on our collar and clogging our comb. Itching can be a problem too.

On average the scalp skin replaces itself about once every 28 days. If turnover speeds up to every 11 days the net result is obvious dandruff. If the metabolic rate is increased still further, for example in psoriasis, where the replacement is every 4 days, a patch of red, thick, adherent scale develops. There are in-between cases where you find larger flakes and itchy red areas scattered about the scalp and along the hairline, even in the ears and eyebrows. We refer to these as seborrheic dermatitis or seborrhea.

In dandruff and seborrhea there has been noted an association with a yeast known as *Pityrosporum ovale*, a member of our normal flora.

Treatment

We are not going to stop this natural process. However, we can control it either by removing scale faster than it is produced or by slowing it down or possibly, where *Pityrosporum* yeast is involved, by reducing its colonization.

How do we remove dandruff faster than it is produced? Obviously, shampooing more often, going from every-third-day to daily or every-other-day shampooing is the simplest solution to mild dandruff. All shampoos have some detergent action and may be more effective if used more often. Another trick in treating bad dandruff is to leave the shampoo in prolonged contact with the scalp. For example, wash hair, rinse, and reapply shampoo, then apply a shower cap for 30-60 minutes, then do a final rinse.

If this isn't successful then consider "dandruff" shampoos." Let us examine how each of the major shampoo categories works, with some pros and cons:

- Zinc pyrithione shampoos like Suave Dandruff Shampoo, Zincon, or Head and Shoulders have been shown to reduce *Pityrosporum* yeast and help mild dandruff and seborrhea.
- Tar-based shampoos like T-Gel, Z-Tar, Ionil T, Sebutone, and Tegrin inhibit turnover of cells (mitosis). They smell "earthy" and take many applications to work. These may reduce itch.
- Salicylic acid shampoos like T-Sal, Ionil, and Sebulex mobilize scale or chemically scrub your scalp. Complaints about these are that they may be harsh and leave the scalp dry, leading to more flaking (a cream rinse following this type of shampoo often solves dryness problems).
- Selenium-sulfide-based shampoos like Selsun or Exsel are usually used 2-3 times a week for 5-10 minutes. Selenium sulfide kills yeast and inhibits cell turnover.
- Ketoconazole/Nizoral shampoo was introduced because of its anti-yeast effects. It is about equal to zinc shampoos, though it may work when other agents fail. It has a pleasant scent. Its prescription strength is 2% and the over-the-counter form is 1% which is adequate for most cases.

Any shampoo may work when another fails. It is important to experiment.

If your dandruff is inflammatory, itchy, or unusually severe, then a prescription steroid lotion or solution like Temovate, Lidex, Synalar, betamethasone valerate, or Dermasmoothe may be the answer. Each has a different consistency so your doctor can help you choose. Steroids almost always can control redness and itching. They are usually applied at bedtime after hair is dampened so the medicine goes on the scalp rather than the hair. Shorter hair makes treatment easier.

Even the toughest cases of dandruff or scalp dermatitis are manageable by mixing and matching various agents we have discussed. Please make a clinic appointment to discuss what is best for you.