

## 12. Skin Diseases

### Reference

Kim CH, Hwang DS, Kim JT, et al. A randomized, double-blind, placebo-controlled study to herbal shampoo and essence about dandruff. *Daehan-Hanbang-AnIbinhupibugwa-Hakhoeji (Journal of Korean Oriental Medical Ophthalmology Otolaryngology Dermatology)* 2007; 20(3): 222–35 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of herbal shampoo and essence on dandruff.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Daejeon Orinetal Hospital), Republic of Korea.

### 4. Participants

Patients with dandruff and *Pityrosporum ovale*, the yeast thought to be the cause of dandruff (n=47).

### 5. Intervention

Arm 1: Two-week treatment with herbal shampoo and essence; hair washed once a day in the morning (n=25, male/female=14/11).

Arm 2: Two-week treatment with conventional shampoo and essence; hair washed once a day in the morning (n=22, male/female=19/3).

### 6. Main outcome measures

- 1) Cell count of the dandruff-producing organism.
- 2) Measurement of sebum secretion rate on upper part of forehead using a Sebumeter®.
- 3) Subjective symptoms score.

### 7. Main results

In Arm 1, treatment significantly decreased the number of *P. ovale* cells and rate of sebum secretion ( $P=0.0083$ ,  $0.0182$  respectively). In both Arm 1 and Arm 2, subjective symptom scores were significantly improved (Arm 1,  $P=0.0006$ ; Arm 2,  $P=0.0182$ ), but there was no significant between-group difference.

### 8. Conclusions

The herbal shampoo and essence treatment reduces dandruff.

### 9. Safety assessment in the article

None. However, no adverse reactions occurred in a previous study using the 2-day herbal patch test in normal male volunteers (n=20).

### 10. Abstractor's comments

In traditional Korean medicine, dandruff is considered to be a sign of seborrheic dermatitis caused by the accumulation of dampness-heat (濕熱) in the spleen and stomach, or due to blood regulation by external wind-heat (風熱). This study confirmed the effectiveness of shampoo/essence containing extracts of five herbs (Sophora Radix, Asiasarum sieboldi, Coptis chinensis Franch, Fritillaria thunbergii Miquel, and Atractylodes lancea DC) for dandruff. Insofar as the safety of the shampoo was previously established and *P. ovale* cell count provided objective data, the results of this study are meaningful.

### 11. Abstractor and date

Nam HJ, 8 June 2010.