



HAIR DISORDERS

EFFICACY AND SAFETY OF SPIRONOLACTONE FOR FEMALE PATTERN HAIR LOSS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: Female pattern hair loss (FPHL) is the most common cause of hair loss in women, with characteristic nonscarring alopecia occurring on the vertex scalp. FPHL has both a physiological and psychological impact on women.

Objective: Since the pathogenesis of FPHL has not been thoroughly elucidated to date, treatment is uncertain and difficult. Spironolactone, an antiandrogen, is one of the available therapies widely used for treating FPHL, although this use is off label. There is a need to evaluate the efficacy and safety of spironolactone in treating FPHL.

Materials and Methods: A systematic literature search was performed in Pubmed (from 1966), Embase (from 1984) and CNKI (from 1994). Study quality assessment and meta-analysis were conducted by RevMan5.3 software.

Results: In total, ten studies were included, of which four were selected for meta-analysis. Two studies compared the efficacy of spironolactone versus no treatment, and pooled analysis showed significant effectiveness of spironolactone in FPHL (OR 2.74, 95% CI 1.33-5.63, $P=0.006$). The other two studies compared the efficacy of spironolactone versus another antiandrogen drug, cyproterone acetate, which were shown to have comparable effects (OR 0.96, 95% CI 0.48-1.93, $P=0.91$). Adverse events, which were reported in only five studies, were mild to moderate and tolerable.

Conclusions: Spironolactone may be an effective and safe treatment for FPHL. However, more high-quality studies are needed for further evaluation.

