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A New Era of 5α-Reductase Inhibitors for Androgenetic Alopecia

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Editorial

Until now oral finasteride and topical minoxidil have been utilized in the clinical practice as enough-evidenced therapeutic drugs for androgenetic alopecia (AGA). Based on high-quality evidences from many placebo-controlled randomized studies, these therapies have been strongly recommended [1].

In addition to these therapies, a new oral drug dutasteride has been reported to be efficient for AGA in a large-scale (n=917) randomized controlled trial (RCT) [2]. This reagent is a 5α-reductase inhibitor similarly to finasteride. Importantly, dutasteride suppresses both type I and II 5α-reductases while finasteride significantly suppresses only type II. Therefore, dutasteride is referred as a "dual inhibitor". In the RCT the effect for hair growth in AGA was compared between 0.5mg/day dutasteride and 1mg/day finasteride. As a result, dutasteride significantly increased hair count and width and hair photographic assessment compared with finasteride [2]. Additionally, dutasteride improved the global photography in Korean men with AGA recalcitrant to finasteride [3]. On the other hand, a meta-analysis study indicated no significant difference in efficacy for AGA between these two drugs [4]. Collectively, it is still controversial whether there is significant difference in clinical efficiency by dutasteride and finasteride.

As for side effects, although sexual side effects may be potentially concerned because of their influence on androgen metabolism, both dutasteride and finasteride are reportedly well-tolerated [4]. On the

other hand, the recent Korean study pointed out that sexual dysfunction occurred in 17.1% AGA patients treated with dutasteride while it was transient [3]. Therefore, if dutasteride become available for AGA in the future, it is important to use it enough carefully especially for sexual side effects.

In Korea oral dutasteride has already been utilized for AGA in the clinical practice and further it will become available in Asian countries including Japan. This new era of 5α -reductase inhibitors provides us new powerful therapeutic modalities and simultaneously requires us to more carefully treat and observe the AGA patients.

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