The Phenotype of Hormone-Related Allergic and Autoimmune Diseases of the Skin: Annular Lesions That Lateralize

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Introduction

Sexual dimorphism with an increased prevalence in women has long been observed in various autoimmune, allergic, and skin diseases. Recent research has attempted to correlate this female predilection with physiologic changes seen in the menstrual cycle in order to more effectively diagnose and treat these diseases.

Case Presentations

**Right:** 40-year-old female with abrupt onset of palmoplantar pustulosis.

**Left:** Significant improvement occurred after three months of therapy with methotrexate-based oral retinoid pills.

**R:** A 19-year-old Caucasian female presented with a large temporal patch of alopecia areata.

**L:** Significant regrowth was evident after three months of therapy with methotrexate and methimazole.

**R:** A 23-year-old Indian female presented with a single patch of alopecia areata.

**L:** Hair regrowth is evident after 3 months of therapy with methotrexate and methimazole.

Discussion

**Anomalous Effects in Female Patients**

Female mice are more prone to autoimmune diseases, such as encephalomyelitis, dermatomyositis, psoriasis, and lupus. Attempts to explain this predilection have focused on changes in the cellular cycle and the hormonal impact on immune function. The female’s immune response exhibits high microangiopathy and neutrophil activity with more efficient antigen presentation [2]. Female mice have a higher rate of ICDs to total gonadectomy. Females also exhibit a higher rate of ICDs to total body weight. In addition, female mice have a higher rate of ICDs to total body weight. In conclusion, female mice have a higher rate of ICDs to total body weight.

**Sex Differences in Autoimmune Disease**

Hormonal effects on immune function, with its associated mosaicism also plays a significant role in the distribution of cutaneous diseases. Famously, for example, the female is the primary autoantigen target in SLE disease as a result of the estrogen pattern that is associated with SLE. In SLE, immune function is affected by sex, with its associated mosaicism also playing a significant role in the distribution of cutaneous diseases. Females, for example, are more likely to develop autoimmune diseases associated with estrogen, such as SLE.

**References**


**Conclusion**

The effective of amines in the animal models is controversial. One pattern is obvious in the female models, where age and immune function with the onset of symptoms, possibly functioning as a marker to follow the progression of disease in women. Further studies are needed to confirm these findings and to better understand the role of sex hormones in autoimmune diseases.