HLA-B*1502 Allele and Carbamazepine Therapy

Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are life-threatening conditions affecting the skin and mucous membranes for which the primary identifiable cause is medication use. Carbamazepine is the most common cause of SJS and TEN. A relationship between HLA genes and carbamazepine-induced SJS and TEN has been described, specifically the HLA-B*1502 allele. In this systematic review and meta-analysis, Tangamornsuk et al confirm this strong relationship among Chinese, Thai, and Malaysian patients and suggest that recognizing HLA-B allele status before initiating drug therapy may be beneficial. These data support the US Food and Drug Administration's recommendations for screening for the HLA-B*1502 allele before initiating carbamazepine therapy in patients of Asian ancestry.

Fcγ Receptor Polymorphisms in Psoriasis

Psoriasis is a chronic, debilitating inflammatory disease associated with impairment of the innate and adaptive immune system. The cytokine network is responsible for initiation, maintenance, and recurrence of skin lesions. Biological agents have emerged as effective treatments for psoriasis, exerting their pharmacologic effects through their variable portion (which blocks the target molecule) and their constant portion (which binds to Fcγ receptors, or FcγRs). In this retrospective case series, Julià et al demonstrate that FcγR polymorphisms play a role in the outcome of anti-tumor necrosis factor treatment of psoriasis. These data may help dermatologists by guiding therapeutic decisions, especially where quick therapeutic responses are needed.

Antimycobacterial Therapy in Sarcoidosis

Cutaneous sarcoidosis is one of the most common extra-pulmonary manifestations of sarcoidosis, and it is often resistant to treatment. A growing body of literature supports the immunomodulatory effects of antimicrobial therapy, and case reports demonstrate improvement of cutaneous sarcoidosis lesions with tetracycline treatment. Because of the possible association between sarcoidosis and mycobacterial antigens, Drake et al hypothesize that broad-spectrum antimycobacterial therapy could lead to improvements in cutaneous sarcoidosis. This randomized, placebo-controlled trial demonstrates that an oral regimen of levofloxacin, ethambutol, azithromycin, and rifampin resulted in significant reductions in cutaneous sarcoidosis lesions.

Debridement Frequency and Healing Time

Debridement is the process of removing necrotic tissue, bacteria, and foreign material from chronic wound beds to facilitate wound healing. Debridement techniques include autolytic, enzymatic, mechanical, surgical, and biosurgical methods. Although wound debridement is widely used, limited research on its efficacy has been conducted. In this retrospective cohort study, Wilcox et al demonstrate that a higher frequency of debridement improves healing outcomes and that wounds with longer intervals between debridements (>2 weeks) healed more slowly.