Dermatology Free from Ointments

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Opinion

In the dermatological treatment onsite various kinds of ointments have been applied to the lesional skin of the patients as a matter of routine, for the provision of antibacterial or antiviral activity at the locale, the promotion of anti-inflammatory effect, moisturization, emollient use, scavenging the necrotic tissue and debris from the surface of the skin ulcers as well as immunomodulation of the host immune cells at the locale, and as such, these types of medication have been employed for eczematous dermatitis, psoriasis, lichen planus, prurigo, erythema multiforme, bullous diseases and even for lymphoma of the skin. On the other hand, however, it has become increasingly accepted that these means of treatments have not sufficed to bring relief from the refractory skin diseases. Such serious disorders include the inexorably progressive skin cancers and the intractable inflammatory dermatoses.

Since last century, surgical resection has stood the test of time as golden standard of the curative therapy for malignant solid tumors of the skin; malignant melanoma [1,2], squamous cell carcinoma [3-5] and basal cell carcinoma [6,7] followed by the radiation treatment and/or the conventional chemotherapy according to conditions. In addition, the roles of the checkpoint inhibitors [8,9] and molecular target-based drugs [10-13] in the treatment of advanced stage melanoma are rapidly being established.

Another recent remarkable progress in dermatology concerns the development of the biologics for the treatment of psoriasis, palmoplantar pustulosis, atopic dermatitis in addition to urticaria. Novel insights into the immunopathogenesis of those diseases have led to the development of new effective therapies. Taking psoriasis as an example, the active components of the injected preparations are the antibodies against the cytokines responsible for the pathogenesis; anti-Interleukin (IL) 23 [14], -IL-23/-IL-12 [15], -IL-17 [16,17], -IL-17 receptor A [18], and -TNF [19-21], based on the understanding of the major role of IL-17-producing helper T lymphocytes. The clinical effects of these biologics were investigated with overwhelmingly excellent results compared to the conventional topical therapies including ointments and phototherapies, and well-tolerated throughout the duration of treatments.

These new therapies have been produced by the recent major advances of immunology, and such multidisciplinary studies-based medications are now replacing the conventional ointments therapy, promising the paradigm shift on dermatological treatments.

References


