Dermatology has changed dramatically in the last 25 years. This revolution occurred in both the diagnostic and therapeutic fields. Dermatology is no longer simply a “descriptive” and “cream-only” medical discipline but a profession that incorporates systemic biological treatments, surgery and cosmetic procedures, and utilizes many diagnostic tools from the fields of immunology, pathology and genetics. This issue of *IMAJ* is partly dedicated to Israeli dermatology to mark its 80th anniversary. Of special interest are two articles that deal with two difficult-to-treat dermatoses: pemphigus and atopic dermatitis. Goldberg et al. [1] discuss the role of drugs in the induction of pemphigus vulgaris, and Zoller and her colleagues [2] show that low dose methotrexate is beneficial in the treatment of atopic eczema. This issue contains a variety of articles covering several fields of dermatology – psoriasis [3], autoimmune diseases [1,4], dermal connective tissue disorders [5], fungal infections [6], drug eruption [7] and cutaneous manifestations of systemic diseases [8], as well as a brief history of dermatology in Israel [9].

The most common and perhaps the best-known skin disease is psoriasis. With a prevalence of 1–3% it is also the most well-known disease in dermatology. The pathogenesis of the disease is based on the immune system with the T cell as a major player. The proliferation of different types of white blood cells, which are responsible for cell-mediated immunity, results in epidermal proliferation and increased vascularity of the skin. In the last two decades treatments such as methotrexate, phototherapy, cyclosporins and retinoids constituted the main therapeutic line for this disease. Recently, biological treatments have begun to emerge [10]. Biological therapy is an immunomodulatory treatment that affects T cells through different pathways. Some inhibit migration and activation of T lymphocytes, some eliminate these lymphocytes, and some inhibit the action of several cytokines. The most frequently used biologics in psoriasis are infliximab, alefacept, etanercept, efalizumb and adalimumab. They act against either tumor necrosis factor-receptor or CD11. Still, the treatments that are available do not cure the disease; they result in a longer remission.

Acne is another well-known dermatological disease. The pathogenesis of this disease is well known and involves androgens, propionibacterium acne, and sebaceous secretion. Probably the most important breakthrough in dermatological treatment is related to isotretinoin, a synthetic retinoid that almost completely cures severe acne [11].

A new and exciting treatment in non-melanoma skin cancers is imiquimod, an immune response modifier that activates T helper cells in the skin and cures superficial types of skin cancers. Photodynamic treatments are another promising therapy for non-melanoma skin cancers. The application of porphyrin cream to the skin followed by illumination of blue or red light activates the drug and inhibits cancer cells in the skin [12]. The use of oral retinoids in transplant patients reduces the number of new non-melanoma skin cancers in these patients.

The surgical and aesthetic branch of dermatology has also undergone a complete transformation. Mohs micrographic surgery is now a well-known and established modality for the treatment of various skin cancers including melanoma, and most if not all of the treatment is performed by dermatologists [13]. Rejuvenation of the skin by different modalities has been developed. The use of different types of fillers, Botulinum toxin and peels has changed the “look” of the patients and our profession [14]. The use of different laser treatments for either medical or cosmetic indications derives from dermatology. Lastly, the skin is a great reservoir for research and many scientific data that contribute to dermatology and other medical professions originate in dermatology.

What was once considered science fiction in the field of dermatology has become a reality, and researchers continue to develop new and exciting therapies for both the health and the aesthetics of our patients.

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Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world.

Albert Einstein (1879-1955)

**Capsule**

**Another source for prostratin**

Despite progress in drug development to target HIV, the virus remains very hard to root out of an infected system entirely, because of latent reservoirs beyond the reach of current treatments. Certain compounds, chief among them prostratin, have recently shown promise for accelerating emergence from these reservoirs which may enhance the long-term effectiveness of other drugs. However, the scarcity of botanical sources for prostratin has hampered progress. Wender and co-authors present an efficient four-step chemical synthesis to produce prostratin from a much more abundant natural precursor. Moreover, the route can easily be modified to afford structural analogs that may enhance therapeutic efficacy.

Science 2008;320:649

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**Capsule**

**Health care workers as a source of MRSA**

There is ongoing controversy about the role of health care workers in transmission of methicillin-resistant Staphylococcus aureus (MRSA). Albrich and colleagues conducted a search of the literature from January 1980 to March 2006, to determine the likelihood of MRSA colonization and infection in health care workers and to assess their role in MRSA transmission. In 127 investigations the average MRSA carriage rate among 33,318 screened health care workers was 4.6%; 5.1% had clinical infections. Risk factors included chronic skin diseases, poor hygiene practices, and having worked in countries with endemic MRSA. Both transiently and persistently colonized health care workers were responsible for several MRSA clusters. Transmission from personnel to patients was likely in 63 (93%) of 68 studies that undertook genotyping. MRSA eradication was achieved in 449 (88%) of 510 health care workers. Subclinical infections and colonization of extranasal sites were associated with persistent carriage.

Lancet Infect Dis 2008;8:289

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