

- arthritis and in their first-degree relatives. *Arthritis Rheum*. 2003;48(4):963-970.
22. Ekström Smedby K, Vajdic CM, Falster M, et al. Autoimmune disorders and risk of non-Hodgkin lymphoma subtypes: a pooled analysis within the InterLymph Consortium. *Blood*. 2008;111(8):4029-4038.
 23. Frenzt G, Olsen JH. Malignant tumours and psoriasis: a follow-up study. *Br J Dermatol*. 1999;140(2):237-242.
 24. Hannuksela-Svahn A, Pukkala E, Läärä E, Poikolainen K, Karvonen J. Psoriasis, its treatment, and cancer in a cohort of Finnish patients. *J Invest Dermatol*. 2000;114(3):587-590.
 25. Ji J, Shu X, Sundquist K, Sundquist J, Hemminki K. Cancer risk in hospitalised psoriasis patients: a follow-up study in Sweden. *Br J Cancer*. 2009;100(9):1499-1502.
 26. Prizment AE, Alonso A, Folsom AR, et al. Association between psoriasis and incident cancer: the Iowa's Women's Health Study. *Cancer Causes Control*. 2011;22(7):1003-1010.
 27. Paradisi A, Tabolli S, Didona B, Sobrino L, Russo N, Abeni D. Reduced frequency of melanoma in 72,739 patients with psoriasis: a retrospective study. *Eur J Dermatol*. 2015;25(2):133-137.
 28. Komura T, Sakai Y, Harada K, et al. Inflammatory features of pancreatic cancer highlighted by monocytes/macrophages and CD4+ T cells with clinical impact. *Cancer Sci*. 2015;106(6):672-686.
 29. McAleer MA, Mason DL, Cunningham S, et al. Alcohol misuse in patients with psoriasis: identification and relationship to disease severity and psychological distress. *Br J Dermatol*. 2011;164(6):1256-1261.
 30. Kirby B, Richards HL, Mason DL, Fortune DG, Main CJ, Griffiths CE. Alcohol consumption and psychological distress in patients with psoriasis. *Br J Dermatol*. 2008;158(1):138-140.
 31. Fantò M, Peragallo MS, Pietrosanti M, et al. Risk of malignancy in patients with rheumatoid arthritis, psoriatic arthritis and ankylosing spondylitis under immunosuppressive therapy: a single-center experience [published online June 23, 2015]. *Intern Emerg Med*. doi:10.1007/s11739-015-1270-0.
 32. England BR, Sayles H, Michaud K, et al. Cause-specific mortality in US veteran men with rheumatoid arthritis [published online June 19, 2015]. *Arthritis Care Res (Hoboken)*. doi:10.1002/acr.22642.
 33. Ogdie A, Haynes K, Troxel AB, et al. Risk of mortality in patients with psoriatic arthritis, rheumatoid arthritis and psoriasis: a longitudinal cohort study. *Ann Rheum Dis*. 2014;73(1):149-153.
 34. Hearn RM, Kerr AC, Rahim KF, Ferguson J, Dawe RS. Incidence of skin cancers in 3867 patients treated with narrow-band ultraviolet B phototherapy. *Br J Dermatol*. 2008;159(4):931-935.
 35. Armstrong BK, Kricker A. The epidemiology of UV induced skin cancer. *J Photochem Photobiol B*. 2001;63(1-3):8-18.

NOTABLE NOTES

Henna—A Temporary Body of Art

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Amidst joyous chatter, choreographed dances, and the aromas of South Asian food, a bride is joined by close friends in her childhood home as she delights in a once-in-a-lifetime celebration. As part of the festivities, a red-brown paste is expertly applied to her arms, hands, legs, and feet in intricate designs of leaves, flowers, and geometric shapes. This paste, otherwise known as henna, is an integral part of this timeless Mehndi ceremony.

Derived from the plant *Lawsonia inermis*, temporary henna tattoo paste (or mehndi) is a mixture of the plant's extracts with water or oil.¹ Decorative patterns are skillfully drawn onto the skin with a brush or thin stick and allowed to dry. A dressing can be applied to improve penetration¹ of the paste into the stratum corneum. Over the course of a few weeks, as corneocytes gradually shed, the tattoos will fade.¹

The practice of henna has a celebrated history dating back over 5000 years to South Asia, the Middle East, and Africa.² Largely associated with the feminine form, use of henna by brides dates back to 2100 BC in Syria, and ancient spiritual rituals dedicated to goddesses often included henna tattoos.² Owing to its unique pigment, henna can also provide relief from the heat when applied to the hands, feet, and scalp. In the past, henna even played a role in the treatments of leprosy and smallpox.¹ Contemporary decorative henna maintains a strong association with traditional celebrations, and its designs often vary with geographic region or culture. In India, fine lines of lacy, floral, paisley patterns are used, while African henna displays bold lines and geometric designs.² Recent popularization of henna in Western culture has been sparked by tourists¹ and even popular musicians like the Spice Girls.³

The red paste traditionally used, known as "red henna," rarely produces adverse effects. However, recent reports of allergic reactions have been attributed to the use of new additives such as coffee, black tea, and even animal urine, which help achieve a darker pigment known as "black henna."¹ The primary culprit in the recent rise of skin reactions is the ingredient paraphenylenediamine (PPD), a coal-tar hair dye.¹ In addition to achieving a darker and longer-lasting color, PPD helps shorten the duration of the tattooing process.¹ While traditional henna sessions can last up to 12 hours, black henna reduces the time to less than 2 hours.³ Use of black henna may be tempting, but its potential for allergic contact dermatitis, severe delayed-type reactions, and more permanent effects, such as persistent leukoderma or hyperpigmentation, is cause for concern.¹ Perhaps it is best to respect the traditional practice of red henna, lest a temporary tattoo result in a permanent scar.

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1. Cartwright-Jones C. Developing guidelines on henna: a geographical approach [dissertation]. Kent, OH: Kent State University; 2006.
2. De Cuyper C, D'hollander D. *Dermatologic Complications with Body Art: Tattoos, Piercings, and Permanent Make-up*. Heidelberg, Germany: Springer; 2010:13-28.
3. Wolf R, Wolf D, Matz H, Orion E. Cutaneous reactions to temporary tattoos. *Dermatol Online J*. 2003;9(1):3.