

Changes in the management of acne: 2009-2019



Diane Thiboutot, MD,^a Brigitte Dréno, MD, PhD,^b Valerie Sanders, BA,^c Marie Jose Rueda, MD,^d
and Harald Gollnick, MD^e

Hershey, Pennsylvania; Nantes, France; Pueblo West, Colorado; Indianapolis, Indiana; and Magdeburg, Germany

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Acne remains one of the most common skin diseases. It can be challenging to treat and often produces a significant psychosocial burden on affected patients and their families.

In 2009, the Global Alliance to Improve Outcomes in Acne, an international working group of dermatologists with broad expertise in acne, published an algorithm for acne treatment.¹ First-line therapy for mild acne included a topical retinoid with the addition of benzoyl peroxide, followed by addition of a topical or oral antibiotic as acne severity increased. Isotretinoin was recommended as first-line therapy for nodular cystic acne, and hormonal therapy (oral contraceptives and spironolactone) was recommended as an alternative therapy for females. Consensus was reached on the need to limit antibiotic resistance. Strategies to accomplish this goal were proposed, including the recommendation to limit use of oral antibiotics to short periods (3 months). Other recommendations included use of topical retinoids in maintenance therapy and aggressive therapy to limit the progression of scarring.

Although these recommendations have not changed significantly since 2009, there is now increased awareness of the need for antibiotic stewardship, reiterated in the 2016 American Academy of Dermatology acne guidelines and the 2018 Global Alliance update on acne management.² Overall, the number of antibiotic prescriptions for

acne actually increased slightly from 26.24 to 27.08 per 100 patients with acne from 2004 to 2013.³ Antibiotic prescribing by dermatologists, however, decreased by 36.6% from 2008 to 2016, with much of this decrease due to fewer extended courses for acne and rosacea.⁴ The median duration of antibiotic therapy for acne also decreased from 345 days (11.5 months) in 2003 to 126 days according to data from 2004 to 2013 and to 99 and 93 days according to data from 2008 to 2010.^{4,5} Prescriptions for isotretinoin have been fairly stable, with a small decrease from 5.43 to 5.35 per 100 patients with acne.³ Prescriptions for oral contraceptives for acne decreased slightly from 34.31 in 2004 to 30.74 in 2013.³ Interestingly, the number of courses of spironolactone per 100 female patients with acne increased dramatically, from 2.08 to 8.13 (a 391% increase), highlighting a positive trend toward hormonal treatments of acne and away from long-term antibiotics.³ This suggests that physicians may be starting to follow consensus guidelines.

Management of acne will continue to change as new drugs and devices become available and as new data on optimal use of current therapies are generated. Encouraging providers to use topical retinoids with or without benzoyl peroxide in all patients with acne, use hormonal therapies for female patients, optimize their use of isotretinoin, and adopt certain behavioral strategies that were recently published

From the Department of Dermatology, Pennsylvania State University, Hershey^a; Department of Dermato Cancerology, Nantes University^b; Sanders Medical Writing, Pueblo West^c; Eli Lilly and Company, Indianapolis^d; and Otto-von-Guericke-University, Department of Dermatology & Venereology, Magdeburg.^e

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Correspondence to: Diane Thiboutot, MD, Department of Dermatology, The Pennsylvania State University College of Medicine, 500 University Dr, HU 14, Hershey, PA 17036. E-mail: dthiboutot@pennstatehealth.psu.edu.

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will also be important to treat acne effectively while avoiding overuse of antibiotics. Laser and light therapies under development may also play more of a role in management of acne in the future. We look forward to what the next 10 years will bring.

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