

CORNERSTONE Critiques

Commentary by Richard A. Johnson, MD, on Current Literature

Beliefs and Perceptions of Patients with Acne

Tan JKL, Vasey K, Fung KY. *J Am Acad Dermatol.* 2001;44:439–445.

Background: There is a paucity of information on the knowledge and understanding of patients with acne about their condition. **Objective:** The objective of this study is to evaluate the knowledge, beliefs, and perceptions of acne patients regarding their understanding of acne pathogenesis, sources of information, treatment options, and expectations.

Methods: Patients referred to a community-based dermatologist for management of acne vulgaris completed a self-administered questionnaire. Responses were correlated with demographic and clinical information. **Results:** Seventy-four percent of patients waited more than 1 year before seeking medical attention for acne. Nonprescription products used most frequently were cleansers, acne pads, and lotions. Acne was most often believed to be caused

by hormonal and genetic factors, although diet, poor skin hygiene, and infection were also implicated. Information on acne was obtained primarily from family physicians, mass media, friends, and family, but was largely believed to be inadequate. Acne was believed to be curable by 49% of patients with an anticipated treatment duration of less than 6 months. Male patients and those with severe acne preferred systemic therapy compared with female patients and those with lesser grades of acne. **Conclusion:** There is a need for accessible, accurate, community-based education on the natural history of acne, pathogenesis, risk of sequelae, the effectiveness and expected duration of treatment, and the importance of prompt medical attention.

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COMMENTARY

This study by Tan et al clearly points out the need for improved patient knowledge with respect to acne causes and cures. Most notably, 31% of patients thought that acne was curable in less than 4 weeks and a significant percentage indicated that they believed stress and skin hygiene played a large role in the aggravation of acne. Almost three fourths of patients waited longer than 1 year to seek medical help with their acne. Primary care physicians should consider proactive approaches for education and treatment of this common condition because, as this study points out, if you wait for patients to come to you, they will be late in coming and will harbor many misconceptions.

Developments in the Treatment of Nail Psoriasis, Melanonychia Striata, and Onychomycosis: A Review of the Literature

Van Laborde S, Scher RK. *Dermatol Clin.* 2000;18:37–46.

Nail psoriasis, melanonychia striata, and onychomycosis are relatively common nail disorders that have generated much research into their pathophysiology and treatment. The authors hope this discussion of the recent therapeutic developments

for treating these disorders will not only inform but will also inspire further investigation so that therapeutic advances may continue.

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COMMENTARY

This excellent review by Van Laborde and Scher from Columbia University provides the reader with the latest available treatments for onychomycosis and psoriasis and an approach to individuals with melanonychia striata. Comparative data are provided for terbinafine and pulse therapy with itraconazole for nail fungus. Additionally, data are presented for fluconazole (an off-label use) for treatment of onychomycosis, which provides the physician with a third oral approach. A topical combination of 20% urea and 2% butenafine hydrochloride also shows promise for this common condition. Guidance for when biopsy is necessary to differentiate melanonychia striata from malignant melanoma is provided and quite helpful in sorting out this condition.

New Treatments and Therapeutic Strategies for Acne

Thiboutot D. *Arch Fam Med.* 2000;9:179–187.

Successful management of acne requires careful patient evaluation followed by consideration of several patient and medication factors when selecting a particular therapeutic regimen. Within the last few years, several new agents for the treatment of acne have become available that afford greater flexibility in the treatment of this prevalent dermatologic disorder. These include adapalene, tazarotene, 2 new topical tretinoin formulations, azelaic acid, a new sodium sulfacetamide formulation, and an oral con-

traceptive recently approved by the Food and Drug Administration for the treatment of acne. After a brief overview of the pathophysiology of acne and existing therapies, this review evaluates the new antiacne agents and how they can be integrated into a successful treatment strategy that takes into account acne severity and predominant lesion type as well as age, skin type, lifestyle, motivation, and the presence of coexisting conditions.

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COMMENTARY

Dr. Thiboutot provides the reader with a concise summary of the available approaches to acne therapy and explains the pathophysiologic mechanisms of treatment and the advantages and disadvantages of each therapeutic agent. Consideration is given to the patient's skin type for not only the therapeutic agent but also the vehicle. For example, solutions and gels are recommended for oily skin; creams, lotions or ointments are better suited to those with dry skin. Some comparative head-to-head data are reviewed, but it is clear there is no winner among the various topical acne strategies for all patients. Oral isotretinoin is very effective, but has a variety of side effects and restrictions. Therefore, knowledge of the patient's experience with available agents and patience with the patient and the disease are critical for a successful physician-patient relationship.

Metronidazole to Prevent Preterm Delivery in Pregnant Women with Asymptomatic Bacterial Vaginosis

Carey JC, Klebanoff MA, Hauth JC, et al. *N Engl J Med.* 2000;342:534–540.

Women with bacterial vaginosis are more likely than those without this infection to deliver a preterm or low-birth-weight infant, and recent studies have shown that women who had a prior preterm delivery are less likely to experience a repeat preterm delivery when they are treated for bacterial vaginosis. If these results can be repeated in the general obstetrical population, it has been estimated that 80,000 preterm births leading to 4000 perinatal deaths and 4000 neurologically impaired infants might be prevented each year. Carey and coworkers report the results of a randomized, placebo-controlled trial of metronidazole to control bacterial vaginosis in a general obstetrical population. Of 1953 pregnant women with asymptomatic bacterial vaginosis enrolled in the trial, 1919 (98.3%) were available for collection of outcome data. At study enrollment, the women were between 16 and 24 weeks pregnant. The women were randomly assigned to receive two 2-g doses of metronidazole (966 women) or placebo (987 women). Diagnostic tests were repeated when women were between 24 and 30 weeks pregnant, and treatment was administered again. Bacterial vaginosis resolved in 77.8% of the metronidazole group and 37.4% of the placebo group. Preterm delivery occurred in 12.2% of the metronidazole group and 12.5% of the placebo group. There were

no significant differences between the 2 groups in frequency of delivery before 37 weeks' gestation, before 35 weeks' gestation, or before 32 weeks' gestation. No significant differences between the 2 groups were seen in incidence of delivery of low-birth-weight infants or very-low-birth-weight infants or in preterm delivery attributable to spontaneous labor or spontaneous rupture of the membranes. No subgroup of women in whom metronidazole significantly reduced the risk of preterm delivery could be identified. No differences between the 2 groups could be found in any other pregnancy-related complication or neonatal complication. The data from this trial indicate that treatment of asymptomatic bacterial vaginosis with metronidazole does not reduce the risk of preterm delivery in women at low risk for preterm delivery or in women with a history of preterm delivery. The authors point out that their results are at odds with 3 recent studies which showed that control of bacterial vaginosis reduces the risk of preterm delivery in women with a history. Nonetheless, they conclude that screening pregnant women for asymptomatic bacterial vaginosis and treating infected women with metronidazole will not reduce the incidence of preterm delivery despite eradication of the bacteria.

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This large, multicenter, randomized, controlled trial for the management of asymptomatic bacterial vaginosis in pregnancy concluded that treatment with metronidazole did not affect the outcome of preterm labor. This is discrepant with several earlier studies, which showed a risk reduction with treatment. The authors point out that 1 of the earlier studies used erythromycin in addition to metronidazole for treatment, and other pretreatment studies looked at only women with a history of preterm labor, as opposed to the general obstetrical population that was used in this trial. For now it is probably safe to conclude that treating the general obstetrical population with metronidazole for asymptomatic bacterial vaginosis will not reduce preterm labor. Whether additional antibiotic usage is required or intervention to reduce preterm labor is warranted will have to await the further progress of medicine.