

# Tretinoin/Benzoyl Morning Dose Safe, Effective

BY ROBERT FINN

FROM THE JOURNAL OF  
DRUGS IN DERMATOLOGY

Studies have shown that a combination of tretinoin and benzoyl peroxide is effective in treating acne; however, the products usually are not administered simultaneously. Tretinoin tends to be degraded by sunlight, so it is typically dosed in the evening. In addition, benzoyl peroxide hastens the breakdown of tretinoin.

But a new study suggests that when the tretinoin is delivered in a gel microsphere pump, the two agents are safe and effective when applied together in the morning (J. Drugs Dermatol. 2010;9:805-13).

The multicenter, phase IV study involved 247 otherwise healthy patients with moderate facial acne vulgaris who were randomized to a 12-week regimen of morning/morning treatment or morning/evening treatment. Physicians monitoring the patients were blinded to their group assignment.

## VITALS

**Major Finding:** A morning/morning regimen of 5% benzoyl peroxide wash plus tretinoin gel microsphere 0.04% is as safe and effective as a morning/evening regimen.

**Data Source:** Randomized, investigator-blinded, phase IV trial of 247 patients with moderate acne.

**Disclosures:** The study was sponsored by Johnson & Johnson, whose Ortho Dermatology division markets the Retin-A Micro Pump. Two of the study investigators are employees of Johnson & Johnson, and several others have served as investigators for the company, including Dr. Fried. One of the authors owns stock in Johnson & Johnson.

The morning/morning group used a 5% benzoyl peroxide wash, then immediately applied two full pumps of the tretinoin gel microsphere (TGM) 0.04% (Retin-A Micro Pump). The morning/evening group applied the benzoyl peroxide each morning and the TGM pump each evening.

The mean age of the patients was 18.5 years, and 51% were female. At the outset, patients' mean acne lesion count was 72.7, of which 27.4 lesions were inflammatory and 45.3 lesions were noninflammatory. Two-thirds of the patients were white, 19% were Hispanic, 10% were black. The rest were of other or mixed races.

At 12 weeks, the mean lesion count of the patients in the morning/morning group was 39.2, compared with 41.4 in the morning/evening group. The difference was not significant. A separate statistical test

demonstrated that the morning/morning regimen was "noninferior" to the morning/evening regimen.

In terms of Investigator's Global Assessment (IGA) score, 23.4% of patients in the morning/morning group and 21.9% in the morning/evening group were judged to be clear or almost clear

of their acne lesions. Also, 45.9% of the patients in the morning/morning group and 47.4% in the morning/evening group improved by at least two IGA grades. Neither of these differences were significant.

There were no significant differences in side effects between the two groups. Patients in both groups experienced similar degrees of erythema, dryness, peeling/scaling, burning/stinging, and itching. Investigators described both regimens as "well tolerated." Thirteen patients in the morning/morning group and 12 patients in the morning/evening group dropped out of the study.

In a statement, study coauthor Dr. Richard Fried, a dermatologist in Yardley, Penn., noted: "These newly published study results are significant for both acne patients and dermatologists as they reinforce the ability to develop skin care regimens that cater to each individual patient's lifestyle, which is important, as simple protocols provide the best chance for clear, beautiful skin." ■

## Analysis: Adherence to Acne Treatment Poorly Studied

BY DOUG BRUNK

FROM JOURNAL OF COSMETIC DERMATOLOGY

Medication adherence among acne patients is so poorly studied that it is difficult to draw any solid conclusions about the topic, results from a new meta-analysis suggest.

"That's a critical issue, because it would be nice to have new treatments, but getting people to be more compliant with existing drugs would be another great way to get people better," one of the study authors, Dr. Steven R. Feldman, said in an interview. "We need more studies, especially those

their medicines just because the disease bothers them."

For the study, Dr. Feldman and his associates conducted a Medline search of articles published between Jan. 1, 1998, and Sept. 1, 2008, that contained the keywords acne and adherence or compliance (J. Cos. Dermatol. 2010;9:160-6).

The researchers found only 13 studies that met their criteria. Of these, six used patient questionnaires to measure adherence, two used patient diaries, and the remaining five used electronic medical records.

Investigators of the largest study in the review asked 2,221 patients to rate their acne medication adherence as daily, almost daily, or rarely (Dermatol. 2008;217:309-14). More than half (57%) rated their adherence as every day, and 38% rated it as almost every day. Forgetting to take the medication was the most common reason cited for low adherence, followed by a perceived lack of time.

A more recent study contained in the review measured acne medication adherence in 152 teens who returned for follow-up at 2 months (J. Cutan. Med. Surg. 2009;13:204-8). Patients were considered to have high adherence if they reported using their acne medication as prescribed 100% of the time, medium adherence 75%-99% of the time, and low adherence 74% of the time and below.

The investigators of this study reported that 24% of patients were rated as having high adherence, 49% had medium adherence, and 26% had low adherence. Patients rated side effects from the medication as the most common reason for low adherence, followed by forgetfulness. ■

## VITALS

**Major Finding:** Researchers found only 13 studies that met their search criteria.

**Data Source:** A meta-analysis of studies published between Jan. 1, 1998 and Sept. 1, 2008.

**Disclosures:** The study was funded by Galderma Laboratories. Dr. Feldman said he has received funding and consulting fees from the company.

that tell us how to improve adherence."

A recurring theme in some of the studies reviewed was that acne patients with a better quality of life tended to take their acne medication as prescribed. "Physicians think, 'acne really bothers teenagers, so they're going to be more likely to use their medicine,'" said Dr. Feldman of Wake Forest University, Winston-Salem, N.C. "In fact, we found that the people who were most bothered by their acne were least likely to use their medicine. Maybe psychologically they don't want to think about their disease. Who knows? But you can't just assume that people will use

## Combination Therapies Equal For Reducing Acne Lesions

BY HEIDI SPLETE

FROM THE JOURNAL OF THE  
EUROPEAN ACADEMY OF  
DERMATOLOGY AND VENEREOLOGY

Combination topical tretinoin and clindamycin was as effective as salicylic acid/clindamycin for reducing lesions in patients with mild to moderate acne, based on data from a

(SA/CDP) or all-trans retinoic acid 0.05% cream plus clindamycin phosphate 1% lotion (all-TRA/CDP). The average lesion count at baseline was 67 in both groups, and the proportion of inflammatory and noninflammatory lesions was similar between the groups (J. Eur. Acad. Dermatol. Venereol. 2010 July 28 [doi:10.1111/j.1468-3083.2010.03793.x]).

## VITALS

**Major Finding:** After 12 weeks, the average total lesion count was 13 in the SA/CDP group and 10 in the all-TRA/CDP group; the difference was not statistically significant.

**Data Source:** A randomized trial of 46 patients aged 18-31 years with mild to moderate acne and an average lesion count of 67.

**Disclosures:** The researchers had no financial conflicts to disclose.

After 12 weeks, the average total lesion count was 13 in the SA/CDP group and 10 in the all-TRA/CDP group; the difference was not statistically significant. The average inflammatory and noninflammatory lesion counts were not significantly different between the two groups (5 vs. 4 and 8 vs. 6, respectively).

12-week randomized trial.

The findings were published online July 28 in the Journal of the European Academy of Dermatology and Venereology. Several types of combination treatments allow clinicians to target different causes of acne vulgaris, but the safety and efficacy of tretinoin/clindamycin phosphate and salicylic acid/clindamycin phosphate have not previously been compared, according to Dr. A. Babayeva of Dokuz Eylül University in Izmir, Turkey, and colleagues.

Researchers randomized 46 acne patients aged 18-31 years to one of the two therapies: 3% salicylic acid plus clindamycin phosphate 1% lotion

After 2 weeks of treatment, significantly more patients in the all-TRA/CDP group showed a 50% reduction in total lesion counts, compared with the SA/CDP group, but there were no significant differences in lesion counts between the groups when patients were assessed after 4, 8, and 12 weeks of treatment, according to the investigators.

All reported side effects were mild to moderate; most occurred during the first 2 weeks. The most common reported side effects were dryness, peeling, erythema, burning, and itching. The proportion of patients reporting at least one side effect was similar between the SA/CDP and all-TRA/CDP groups (83% vs. 74%). ■