

With the availability of different topical antiacne agents targeting different pathogenetic factors, it makes sense to combine them to enhance therapeutic efficacy, to make therapy more user-friendly, to minimize adverse effects, and to prevent or reduce bacterial resistance. This has been achieved through loose and fixed combinations.

Topical retinoids in combination with topical or oral antimicrobials have been proven to reduce acne lesions, both comedones and inflammatory, faster and to a greater degree than antimicrobial therapy alone.<sup>[1]</sup> Together they target three out of four pathogenetic factors, namely: ductal hypercornification, *P. acnes* colonization, and inflammation.<sup>[1]</sup> Further, topical retinoids, through a thinning effect on stratum corneum, facilitate percutaneous penetration of topical antibiotics, and help achieve higher concentrations of the antimicrobial agent in the pilosebaceous canal which *P. acnes* inhabits.<sup>[1]</sup> Several clinical studies have evaluated loose<sup>[2,3]</sup> and fixed<sup>[4,5]</sup> combinations. All studies have arrived at the same conclusion that combinations are more effective. It has been recommended that combination of topical retinoid and topical antimicrobial be employed early in the treatment of mild to moderate acne, and a combination of topical retinoid and systemic antibiotic in severe acne.<sup>[6]</sup>

Combination topical therapy is quite popular in our country. Often we go overboard and mix topical agents with gay abandon. It is common to come across prescriptions where four or more topical agents are mixed with no indication of methodology, leaving it to the poor patient to figure it out! This is proof of our professional freedom. The problem is mainly with loose combinations where chemistry and compatibility need to be understood. We also have available an array of fixed combinations [Table 9]. Recent market data from Europe and USA reveal that the prescriptions for fixed combinations have increased while those for BPO have declined, and the market curve for topical antibiotics is flat.<sup>[7]</sup> Fixed combinations offer therapeutic breadth and practical convenience.

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**Table 9: Available fixed combinations of topical antiacne products in India**

Benzoyl peroxide + erythromycin
Benzoyl peroxide + clindamycin
Adapalene + clindamycin
Tretinoin + clindamycin
Clindamycin + nictotinamide + aloe allantoin
Clindamycin + nicotinamide + tea tree oil
Benzoyl peroxide + sulfur