

## Cosmetics by Prescription

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Standard cosmetics are used to adorn or cover certain physical characteristics. Consisting mostly of paints and fragrances, these compounds have little direct effect on the human body. They are sold to the general public with few restrictions and are often heavily advertised. Anything that brings about an actual *change* in a physical characteristic is considered by our society to be more medical than cosmetic. Indeed, in the past, any attempt to change physical characteristics has required a surgical procedure and a trained physician-surgeon. (Ear piercing and tattooing are notable exceptions.) The list of surgical procedures used by physicians for cosmetic purposes is extensive: hair transplantation, breast augmentation, liposuction, rhinoplasty, and dermabrasion, to name a few. The physicians who provide these services generally rely on conventional referral systems and the word-of-mouth advertising of satisfied patient-customers. A number of providers of cosmetic surgery have taken to more direct advertising.

But a subtle shift has occurred. Now there are prescription medications that have cosmetic potential. Topical minoxidil for male pattern baldness and tretinoin for fine skin wrinkling are prime examples. The use of exogenous growth hormone in the absence of documented growth hormone deficiency might also be included in this category. The primary care physician has become an intermediary between the supplier of prescription cosmetics and the consumer. A number of important ethical issues are raised that have a direct bearing on family physicians. Benjamin and colleagues<sup>1</sup> have already addressed the ethical issues surrounding the use of growth hormone. A more general conceptualization of the ethical issues surrounding prescription cosmetics is presented here.

Topical minoxidil was licensed by the Food and Drug

Administration (FDA) in August of 1988 for the treatment of male pattern baldness. The product has been heavily advertised both to primary care physicians and to the general public. The manufacturer states that this two-pronged marketing effort is necessary because topical minoxidil is a "consumer driven product" (K. Bennette, The Upjohn Co, personal communication, March 27, 1989). Few physicians actively promote the drug. Consumers must be motivated to ask their physicians for it. Tretinoin has been approved by the FDA for severe acne for over a decade, but it is not approved for use on dermatohelioses such as fine skin wrinkling. The manufacturer of tretinoin advertises only to physicians and only for the approved indication. Interest in the use of tretinoin to reverse "skin aging" seems to have been generated primarily in the popular press.<sup>2</sup>

Before considering any prescription cosmetic, the primary care physician must first reflect upon his or her understanding of the goals of medicine. Some will narrowly define the scope of medicine to include only those activities that promote the functional integrity of the organism. Prescription cosmetics fall outside of this definition of medicine. Those who hold this extreme view likewise would not consider many plastic surgical procedures as appropriate medical activities. Others, however, will define medicine as all activities that endeavor to alter physical conditions that are perceived as preventing the pursuit of legitimate goals. This less restrictive construct is generally espoused by those involved in cosmetic procedures. Naturally, intermediate interpretations are possible.

Family physicians have an understanding of medicine that expands upon the biomedical realm, and any contemplation of the use of prescription cosmetics must also consider the social and psychological dynamics of these products. Socially, there can be no denying that appearances are important. It has been noted, for example, that in the vast majority of American presidential elections, the shorter candidate lost.<sup>1</sup> But even if a trait is socially disadvantageous, efforts to alter the trait may be well meaning but misdirected. Racism and sexism represent extreme forms of social ostracism for physical characteristics. Clearly, in these cases, the preferred management is to address the prejudice. By analogy, when a patient requests

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a prescription cosmetic, part of the physician's management should be to help the patient confront the prejudices of others rather than to seek conformity.

The advertising of prescription cosmetics and the media coverage that accompanies new products and applications have profound effects on patients that family physicians need to recognize. Patients who are not overly concerned about the social impact of their appearance may be negatively influenced by marketing propaganda. For example, the advertising for topical minoxidil states, "If you are losing your hair, you no longer have a reason to lose hope."<sup>3</sup> Advertising may spread the seeds of self-doubt and generate a market for the product by creating a pool of worried well. The promise of looking eternally youthful fueled media and public interest in tretinoin in the absence of any direct advertising. The promise of eternal youth remains fascinating to most of us and springs from our culturally shared fears of aging and death. In essence, both the popular media and advertising generate strong messages of doom and hope in order to control certain markets. It is important, therefore, that physicians carefully explore a patient's motivation for requesting a prescription cosmetic. If media-aggravated anxiety is a major factor, then it needs to be recognized and dealt with directly.

Even in the absence of heavy media attention, patients with low self-esteem will frequently be the ones who request prescription cosmetics. When self-esteem is low, any trait—even one that other people might consider an asset—may be viewed as a handicap and become the channel for self-directed anger. These patients believe that their self-esteem will be restored with treatment of the undesired trait by a prescription cosmetic. Because of this unrealistic expectation, such patients are rarely satisfied with the results of therapy. Family physicians can assist these patients by helping them redefine their weaknesses (looking older) as strengths (being mature) and helping them focus on and develop their more valued traits. Short-term supportive psychotherapy also may be appropriate when patients seek out prescription cosmetics during times of social stress.

In addition to these general principles, family physicians also need to be familiar with the individual characteristics of each prescription cosmetic that becomes available. As with other medications, the characteristics of primary importance are efficacy, duration of action, side effects, and cost. Not surprisingly, the psychosocial pressures to use prescription cosmetics have a unique impact on each characteristic.

A prescription cosmetic that is 100% effective is an unattainable ideal. Like all other medicines, prescription cosmetics are ineffective or poorly effective in a number of patients. At first glance, a treatment failure would appear to be harmless, since the drug was not medically essential to begin with. There may be psychological consequences, however. For example, topical minoxidil produces moder-

ate to dense hair growth in fewer than one half of its users after 1 full year of twice daily application.<sup>4</sup> Such a long, intense treatment regimen can only serve to heighten the disappointment felt by those who obtain only a partial response to the medication. Satisfaction with appearance may thereby be further eroded, producing an iatrogenic loss of self-esteem. Additionally, frustration with lack of efficacy may lead to overmedication and a substantial increased risk of toxicity. Overmedication would be particularly problematic with medications that have side-effect profiles like those of tretinoin.

The duration of a prescription cosmetic's effect must also be carefully considered. The effects of growth hormone administered in childhood are life-long. Obviously, great deliberation is in order before using any such medication. But a physician can be no less cavalier about starting a prescription cosmetic whose effects reverse with discontinuation of the therapy because all such therapies carry a potential for psychological addiction. For example, the effects of topical minoxidil are completely reversed within 4 months of stopping the medication,<sup>4</sup> with vertex hair loss occurring at a rate perhaps 20 times that seen in untreated male pattern baldness. It may be extremely difficult for a man who was insecure about his hair loss initially to tolerate this rapid change in body image. Data are lacking on the duration of effect from tretinoin.

There are occasional adverse reactions to prescription cosmetics, and family physicians need to understand that patients with strong cosmetic concerns are unlikely to tolerate even minor cosmetic side effects. Tretinoin, for example, is far from innocuous. It typically produces some degree of dermal inflammation with dryness, peeling, redness, and edema. It can also produce severe dermatitis that requires discontinuation of the drug.<sup>5</sup> Furthermore, because other vitamin A compounds are known to be teratogenic, physicians are discouraged from using tretinoin in pregnancy.

Finally, prescription cosmetics have a number of economic and social implications. They can be relatively expensive, and insurers will not cover their cost. Prescription cosmetics are therefore most available to the affluent who can pay for them out of pocket. The technology is also available to those of more modest income who are willing to make some economic sacrifices. Physicians should inquire about the extent and appropriateness of these sacrifices. The poor will not have access to prescription cosmetics. Already economically disadvantaged, they also will be denied the social advantages of biologically tinkering with their looks. While this social injustice is minor when compared with heavy burdens of substandard educational opportunities and inadequate nutrition, it is yet another disenfranchisement of those already at the edge of society.

Family physicians will become the gatekeepers for a growing arsenal of prescription cosmetics. Our responsibil-

ity is to use these products only with an awareness of their wide biopsychosocial impact.

References

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