The number of aesthetic facial procedures continues to increase every year; there were a total of 11 million procedures performed in 2005, 9 million of which were nonsurgical. The demand for these procedures has increased dramatically, particularly in the area of facial resurfacing, with 550,000 chemical peels, 1 million microdermabrasion procedures, and 400,000 laser resurfacing procedures carried out in 2005. Facial resurfacing is now an integral part of the aesthetic facial surgeon’s palette of techniques for facial rejuvenation.

As in other areas of aesthetic surgery, patients who seek these procedures are not suffering from an illness or trauma; they are instead seeking to improve in their physical appearance. The elective nature of these procedures imposes a different level of expectation with regard to outcomes and the avoidance of complications as compared with medically essential treatments.

Proper patient selection is paramount for the success of facial resurfacing procedures. If the surgeon has questions about the patient’s likelihood of following preoperative and postprocedure care instructions and other recommendations, the best option is often to defer the performance of these procedures on that patient. For example, patients must be willing to commit to applying topical emollients or ointments after a chemical peel procedure, potentially up to 6 times a day.

Patients who are seeking aesthetic surgery should participate in a thorough process of evaluation and discussion with their surgeons. Obtaining an appropriate medical history with focused attention paid to any medications or underlying medical conditions that may affect the surgical outcome is extremely important to avoid predictable complications and to select the right procedure for the patient. The patient’s habits, including sun exposure expectations, cosmetic regimen, and lifestyle, are all important factors for predicting the outcomes of their procedures. A history of abnormal scarring, collagen vascular disease, or previous surgery in the area undergoing treatment can predict possible abnormalities in postoperative healing. Previous radiation therapy may disturb the skin’s architecture, reduce the number of pilosebaceous units needed to heal after resurfacing, and possibly affect recontouring efforts. The use of isotretinoin substantially increases the risk of scarring, and it must be stopped for at least 6 months preoperatively. The assessment of the patient’s psychologic stability may help to avoid performing procedures on potentially problematic individuals. At times, a preoperative psychologic consultation may be necessary. Many patients undergo resurfacing with high expectations regarding the results. Demanding or imbalanced patients may have disturbed or unrealistic expectations.

A recent study evaluated 212 patients undergoing ablative pulsed carbon-dioxide laser resurfacing. There was an 89% overall satisfaction rate (i.e., “they would do it again”). Predictors of patient satisfaction included expectations of mild to moderate improvement, hopes for improved appearance, and healthier-appearing skin. Correlates of dissatisfaction included preoperative expectations of improved self-esteem after therapy, a belief that the face was disfigured before treatment, and an expectation of complete or near-total improvement of the aging skin.

After obtaining a thorough history, the physician must perform a thorough evaluation of the patient’s physical status. For patients seeking facial resurfacing, particular attention is paid to the condition and objective qualities of the facial skin. Analyzing the degree of skin changes, assessing the skin coloration and the Fitzpatrick skin type, and determining the degree of aging changes (including assessment with the Glogau scale) are parts of this evaluation. The degree of skin pigmentation is a key predictor of an uneventful outcome of particular facial resurfacing procedures and the potential need for a preprocedure regimen of topical therapy. Photographs of the patient should be obtained to document problem areas and to allow for the prospective evaluation of their improvement after the resurfacing procedure.

During their discussions about the upcoming procedure, the patient and surgeon should discuss the nature and limitations of the chosen procedure as well as the expected outcome. For example, patients with relatively fine rhytids will often do well with a variety of procedures, including medium-depth peels and other resurfacing techniques, whereas those with deeper rhytids can only achieve complete resolution with deeper resurfacing.