

Keys to a Successful Refractive Surgery Center

Two of the most important elements are patient satisfaction and high-end technology.

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In recent years, there has been much development in corneal refractive laser surgery techniques and technologies. With the resultant increase in surgical capabilities, patient demands and expectations have also increased. Therefore, we believe that patient satisfaction must always be a key element in the evaluation of the overall success of any refractive surgery procedure.

ReLEx small incision lenticule extraction, or SMILE, has become our first choice for corneal refractive surgery in myopic patients. We have been performing the procedure for 3 years and have witnessed its many advantages over LASIK, including high predictability, being virtually painless, fast healing, and the reduced risk of dry eyes due to the elimination of a corneal flap. In more ways than one, SMILE continues to meet the expectations of our highly demanding refractive surgery patients.

A BRIEF HISTORY

In 2005, we started performing PRK with the MEL 70 G-Scan excimer laser (ZEISS). In 2010, we purchased the MEL 80 and, in 2014, the VisuMax femtosecond laser (ZEISS). At that time, we started to perform femtosecond LASIK (femto-LASIK) and SMILE. Today, we continue to perform PRK, femto-LASIK, and SMILE, although our indications have changed (see *Treatment Protocols at Ama Optimex Eye Clinic* for more information).

In short, usually when we make a recommendation to a patient, we consider a sum of medical criteria including diopter range, indications, and contraindications as well as subjective factors like occupation, patient expectations, and financial considerations. In our clinic, we use a range of refractive surgery procedures including corneal laser surgery and refractive lens exchange, with the sole purpose of completely addressing the patient's needs.

INTRODUCING A HIGH-END PROCEDURE, OBTAINING PATIENT FEEDBACK

About the same time that we introduced SMILE at our clinic, the refractive surgery market in Romaina was in decline, like everywhere else. Being the first to introduce a high-end procedure such as SMILE gave us the opportunity to make the procedure known to the public and to inform and educate patients through intense marketing campaigns.

The typical profile of a refractive surgery patient is young, active on the internet (especially with social media), and well educated. For these reasons, we have found that a targeted

Treatment Protocols at Ama Optimex Eye Clinic

PRK

- Myopia up to -5.00 D
- Myopic astigmatism up to -2.00 D
- SEQ up to -5.00 D
- Hyperopia up to 1.50 D
- No hyperopic astigmatism treatments performed as PRK

Femto-LASIK

- Myopia up to -7.00 D
- Myopic astigmatism up to -5.00 D
- SEQ up to -7.00 D
- Hyperopia up to 4.00 D*
- Hyperopic astigmatism up to 4.00 D*
- Spherical equivalent up to 4.00 D*

SMILE

- Myopia up to -10.00 D
- Myopic astigmatism up to -5.00 D
- SEQ up to -12.50 D

Abbreviations: SEQ = spherical equivalent

*Out of CE-approved range

marketing strategy that engages with patients mainly online is very fruitful. We have designed a dedicated website for refractive surgery, describing every refractive surgery technique available in our clinic. The main message to patients is that we can find a solution for anyone who wants to achieve spectacle independence. We have also invested in search engine optimization and in our presence on social media. All of this has resulted in a constant increase of refractive surgery patients presenting in our clinic.

We strongly believe that setting realistic patient expectations is one key to ensuring that patients are both satisfied and cooperative. In order to better understand the needs and satisfaction levels of our patients, we developed an online survey

Results of the Patient Questionnaire

SMILE Group:

- Most patients gathered information about the procedure from the practice's dedicated webpages and Facebook but also from friends, family, and medical forums
- Reasons for having surgery were: becoming spectacle independent (71%), decreased tolerance for spectacles or contact lenses (21%), because of their profession (19%)
- The advantages of SMILE: painless during and after the procedure (80%); minimally invasive, flapless technique (73%); rapidly resume normal daily routine (69%); correction of high myopia and astigmatism (69%); safety (57%); rapid visual recovery (59%)
- The day of the surgery: feeling safe/surrounded by a pleasant environment (61%); concerns were rapidly put to rest by medical staff (41%); surgery was much easier than expected (45%)
- Immediate postoperative period: blurry vision (50%); minimal discomfort (40%); no concerns about recovery (40%)
- Postoperative treatment: easy to administer and painless (93%)
- Visual recovery: visual improvement in a few hours after surgery (35%); visual improvement after few days (40%); good visual acuity but fluctuating sometimes (18%); other answers (7%); no future concerns (36%); concerned about regression (39%); concerned about presbyopia (25%)
- Other: happy about the decision of having SMILE (98%); willing to recommend the procedure to family and friends (97%)

Femto-LASIK Group:

- Most patients gathered information about the procedure from the practice's dedicated webpages and Facebook but also from friends, family, medical forums, and medical info webpages
- Reasons for having surgery were: becoming spectacle independent (59%), decreased tolerance for spectacles or contact lenses (30%)
- The advantages of femto-LASIK, rapid visual recovery (56%); painless during and after the procedure (56%); only technique appropriate for them (48%)
- The disadvantages of femto-LASIK: eye rubbing (50%); sustaining some type of injury prone to dislodging the flap (48%); creation of the flap (19%); postoperative limitations (22%)
- Immediate postoperative period: involuntary eye rubbing (48%); foreign body sensation requiring the use of artificial tears (41%); blurry vision (30%); dry eye sensation (15%)
- Postoperative treatment: painless and easy to apply (81%); fast or very fast recovery (70%)
- Future concerns: none (44%); regression (27%); that the flap might be torn or displaced after minor eye injury (15%); presbyopia (11%)
- Other: happy with their decision and they would recommend the clinic to friends and family (93%)

that was sent to all of our femto-LASIK and SMILE patients who had surgery between 2014 and now. Most of our femto-LASIK patients were hyperopic and therefore could not have been treated with SMILE.

A study, based on multiple choice and open-answer patient questionnaires, was created to establish the degree of patient satisfaction after SMILE and femto-LASIK. It evaluated key parameters in patient satisfaction, such as comfort during surgery and the immediate postoperative period, the rate at which normal activity can be resumed after surgery, the impact of postoperative treatment, and limitations on lifestyle. Also, we aimed to establish each patient's preoperative expectations and future concerns and the subjective perception on visual recovery speed and postoperative quality of vision.

The survey was designed to reveal the main information sources used by patients to learn about each technique and the degree of awareness in terms of suitability, safety, and stability that patients acquired prior to surgery. We included some questions about the overall opinion on the quality of medical services and the availability of medical personnel; both questions were found to be particularly useful for improving our daily practice.

RESULTS

The results of the survey showed that patients perceive SMILE as a friendly, virtually painless, and safe procedure that provides fast visual recovery. It also indicated that SMILE is capable of meeting patient needs and expectations and that patients have less concerns for the future, like risk of flap dislocation, dry eye, or regression. On the other hand, results of the survey indicated that questions about femto-LASIK included the existence of the flap, its possible dislocation after trauma or certain sports and activities, the longer period of restrictions after surgery, and the risk for dry eye disease (DED).

Also relevant is that, in my practice, I perform SMILE more often than other procedures because I think it better corrects a larger range of myopia and myopic astigmatism compared to other refractive surgery techniques, such as femto-LASIK. A more thorough look at the study results can be found in the *Results of the Patient Questionnaire* box above.

CONCLUSION

The results of the questionnaire indicated that SMILE was superior to femto-LASIK in terms of patient satisfaction, especially when

addressing topics such as potential complications, intraoperative comfort, visual recovery, postoperative restrictions, and DED. Based on our own treatment protocol, SMILE not only corrects a large range of refractive errors, but it also has less incidence of dry eye symptoms postoperatively and allows patients to resume their normal daily activities with no limitations more quickly than other refractive surgery procedures.

Patients also recognized the advantage of having a safe and stable procedure that requires only a 72-hour period of postoperative restrictions, compared with a flap-based procedure that lengthens the period of postoperative restrictions to several weeks and comes with concerns about flap dislocation during sports or eye contact. (The 72-hour window is our recommendation, but some other clinics have even fewer hours of restriction after SMILE.)

Performing the SMILE procedure in our clinic for the past 3 years has increased the indication range for refractive surgery, placing us at the top of the Romanian refractive surgery provider list. Increasing patient awareness by means of dedicated web and social media pages has facilitated contact between refractive surgery candidates and medical personnel, allowing the former to make correct and informed decisions about the type of refractive surgery best suited to their needs.

Based on the consultation with the patient and his or her test results, only then will the surgeon make the recommendation for the appropriate laser technique, which in the majority of our myopic patients is SMILE. ■

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