Patient Satisfaction with Medical Tourism: A Review of 460 International Plastic Surgery Patients in Colombia

Alex Campbell, MD*†
Carolina Restrepo, MD*†
Genesis Navas, MD*

Background: Cosmetic surgery is at the forefront of an exploding medical tourism industry. Patients are able to research options globally through the internet, and increasing numbers are seeking improved service, quality, and value through surgery overseas. Little work has been done to measure the patient experience when traveling for surgery and, to our knowledge, this is the largest study of its kind to examine patient satisfaction with medical tourism.

Methods: We retrospectively reviewed patient satisfaction surveys completed by 460 consecutive international patients receiving cosmetic surgery at a private plastic surgery practice in Cartagena, Colombia, between February 2016 and April 2018.

Results: Overall patient satisfaction was excellent, with 98.2% responding that they would refer us to friends and family. Patient satisfaction ratings across all other items was also very high (range: 97.1%–100%) for information provided, the surgeon, the staff, facilities, and payment.

Conclusions: Excellent patient satisfaction is possible with medical tourism if the patient perceives and receives value through effective results, a pleasant experience, and favorable costs. These successes in plastic surgery medical tourism highlight the potential for significant continued growth in this sector as a whole.

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INTRODUCTION

Patients are traveling more than ever for surgery, and cosmetic surgery is at the forefront of an exploding medical tourism industry. Patients are now able to research options globally through the internet, and increasing numbers are seeking improved service, quality, and value through surgery overseas. In 2019, we published a review of 658 international patients receiving 1796 cosmetic surgery procedures at our private plastic surgery practice in Cartagena, Colombia. These data highlighted trends defining plastic surgery medical tourism, indicating that traveling for surgery is widely appealing for all types of aesthetic surgery and across all demographics of plastic surgery patients. The next logical step was to measure the patient experience when traveling for surgery. To our knowledge this is the largest study of its kind to examine patient satisfaction with medical tourism.

METHODS

We retrospectively reviewed patient satisfaction surveys completed by 460 consecutive international patients receiving cosmetic surgery at a private plastic surgery practice in Cartagena, Colombia, between February 2016 and April 2018. All patients included in this study originated from outside Colombia, underwent multidisciplinary pre-operative assessment, standardized photographs, cosmetic surgery procedure(s), and follow-up care by the primary authors (AC and CR). All procedures were performed under general anesthesia in an accredited hospital. The primary outcome variable was the response to the item “Would you refer us to friends and family?” This was chosen because it has been shown to be a proxy for overall satisfaction, and because institutions regularly use this item to determine professional bonuses as well as potential for expansion. The survey also asked patients to rate their experience using a Likert scale ranging from 1 to 5, where 1 = very poor and 5 = very good. Items to rate included communication, the surgeon, the staff, payment, facilities, and overall assessment. There was also room in the survey for free text input from the patients. The survey was administered to all patients at the authors’ practice after the final post-operative appointment before traveling back home. There were no enticements or financial incentives. Confidentiality of responses was maintained.

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The results of the 12 questions in the survey are provided in Table 1. Responses indicated that overall patient satisfaction was very high. In response to the primary outcome variable, 98.2% responded that they would refer us to friends and family. Patient satisfaction ratings were similarly high across other survey items. Patients were satisfied with information provided regarding procedures (100%), procedure risks (98.7%), and postoperative care (98.6%). Patients were likewise satisfied with performance of the surgeon in regard to listening to them (99.8%), explaining what they wanted to know (100%), and providing good advice and treatment (99.8%). They were happy with the care provided by the staff (99.2%) and the facilities (99.8%). Patients were also overly positive in regard to payments, including the amount paid (99.3%), explanation of charges (97.1%), and collection of payment (97.7%).

### DISCUSSION

Plastic surgery has enjoyed impressive growth over the past 25 years. In 2019 the American Society for Aesthetic Plastic Surgery reported 1.5 million surgical procedures performed in the United States, with Americans spending more than USD $6.5 billion. Plastic surgery trends worldwide are similar, with the International Society of Aesthetic Plastic Surgery (ISAPS) reporting 10.6 million surgical procedures performed globally in 2018. This growth is expected to continue, as people of all ages, occupations, and social classes increasingly seek cosmetic surgery.

The medical tourism industry is also growing rapidly, attracting millions of patients who seek value and excellence in healthcare services. It is an integrated and collaborative approach by the healthcare and tourism industries, providing patients with a unique experience combining treatment, service, and recreation. Factors that have led to the increasing popularity of medical travel include the high cost and lack of access to healthcare in home countries, ability to research providers worldwide, ease and affordability of international travel, and improvements in both technology and standards of care in many countries. The size of the Global Medical Tourism Market was USD $27.8 billion in 2019 and estimated to be growing at a combined annual growth rate of 18.8%, to reach USD $65.8 billion by 2024. Aggressive continued growth is expected, as demand increases and advances continue to improve the end product for patients.

Cosmetic surgery patients represent the largest segment of the medical tourism market, and they pay out of pocket to achieve their goals. They desire safety, expertise, service, affordability, and an excellent overall experience. Patients are no longer limited by treatment options available in their home communities, and use the internet to research options globally. Our previous manuscript examined 658 international patients receiving 1796 cosmetic surgery procedures and defined the demographics of patients traveling abroad for surgery and the procedures they are receiving. That cohort included patients traveling to Colombia from 34 different countries spread across 6 continents. Ninety percent of patients came from North America representing 38 states in the USA and 7 provinces in Canada. An estimated 83% of patients were women and 90% were between the age of 20 and 54. Patients received the full spectrum of aesthetic procedures of the face (20%), breast (20%), and body (60%). In total, 72% of patients received combination procedures, with an average of 2.7 procedures per patient. These data highlighted trends defining plastic surgery medical tourism, indicating that traveling for surgery is widely appealing for all types of aesthetic surgery and across all demographics of plastic surgery patients.

The next logical step was to measure the patient experience when traveling for surgery, and to our knowledge this is the largest study of its kind to examine patient satisfaction with medical tourism. Patient satisfaction is a healthcare metric that is gaining credence as a reflection of the quality of care provided to patients. Modern day quality improvement programs in health institutions across the world have prioritized the assessment of patient experience and satisfaction. To the authors’ knowledge, this is the first study to examine patient satisfaction in a large of cohort plastic surgery patients traveling overseas for cosmetic procedures.

We reviewed patient satisfaction surveys completed by 460 plastic surgery medical tourism patients traveling to Cartagena, Colombia, for plastic surgery. The primary

| Table 1. Patient Satisfaction Questionnaire and Survey Results |
|---------------------------------------------------------------|
| **Category** | **Question Item** | **Yes** | **No** | **Neutral** |
|---|---|---|---|---|
| Overall satisfaction | Would you refer us to friends and family? | 98.20% | 1.80% | — |
| Providing information | You were provided with complete and understandable information regarding your procedure(s). | 100% | — | — |
| | You were provided with complete and understandable information regarding procedure risks. | 98.70% | 0.40% | 0.90% |
| | You were provided with complete and understandable information regarding postoperative care and recommendations. | 98.60% | 0.70% | 0.70% |
| Surgeon | The surgeon listened to you. | 99.80% | — | 0.20% |
| | The surgeon explained what you need to know. | 100% | — | — |
| | The surgeon gave you good advice and treatment. | 99.80% | — | 0.20% |
| Staff | The staff was friendly and helpful to you. | 99.20% | 0.20% | 0.40% |
| Facilities | The facilities were neat and clean. | 99.80% | — | 0.20% |
| Payment | You are satisfied with the amount you paid. | 99.30% | — | 0.70% |
| | You are satisfied with the explanation of charges. | 97.10% | 0.20% | 2.70% |
| | You are satisfied with the collection of payment. | 97.70% | 0.20% | 2.10% |

Results show excellent overall patient satisfaction in general and across categories of information provided, the surgeon, the staff, facilities, and payment.
outcome variable and marker for overall patient satisfaction was, “Would you refer us to friends and family?” Overall patient satisfaction was very high, with 98.2% of patients responding that they would refer us to friends and family. Patient satisfaction ratings across all other items was also very high (range: 97.1%–100%) for information provided, the surgeon, the staff, facilities, and payment.

We attribute these very high patient satisfaction ratings to a perception of excellent value received by the patient, as our process of care is designed to add to every part of the plastic surgery process.³

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\text{Value} = \frac{\text{Results} + \text{Experience}}{\text{Investment}}
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Patients research plastic surgery online, and our website and social media sites provide detailed information on our practice, our procedures, and our patients. After submitting medical information and photographs, patients have a consultation through phone or video chat with one of our surgeons. Patient coordinators assist with scheduling and preparation for surgery, including laboratory tests, medical clearances, travel, accommodation, and logistics. Our surgical packages are comprehensive and include all medical and surgical care, airport transfers, accommodation, medications, and post-operative therapy. On arrival, a driver picks up patients at the airport and a patient concierge provides a welcome introduction and settles them into their accommodation. The patient has their preoperative consultation with their plastic surgeon, and a nurse accompanies the patient to see the anesthesiologist and to gather medications, garments, and supplies for surgery. On the day of the surgery, a nurse picks the patient up to go to the hospital. After preoperative preparation and marking they are transported to the operating suite, which is modern with the latest anesthesia and surgical equipment. During the majority of our cases, we use two plastic surgeons, allowing us to do more surgery with less anesthesia time. Operative times are kept under 6 hours, with a typical combination procedure taking around 4 hours.

After surgery, patients are monitored in the post anesthesia care unit until ready for discharge. Most patients are discharged the same day, though we do not hesitate to admit the patient for inpatient care when indicated. Nurses transport patients home, and we provide overnight nursing on the night after surgery, and beyond if needed. Most patients recover in beach front condominiums managed by the practice, but many stay at local hotels or rented apartments. Our nursing team visits the patients every morning to provide monitoring and postoperative care, and aestheticians visit patients daily to provide therapy and massage. We stress compliance with postoperative instructions, a healthy diet, and early activity. Our intimate access to patients allows us to provide continual motivation and guidance, and to catch issues quickly when they present. When postoperative complications do arise they are treated immediately, and all patients are issued an insurance policy that covers costs related to diagnostic, hospital, and surgical fees. Patients see the plastic surgeons regularly during their postoperative course, and at the final visit we review their progression and provide instructions for care of incisions, compression of operative sites, diet recommendations, activity restrictions, and follow-up. Patients typically stay in Cartagena for 7–14 nights depending on the procedure(s), though this is individualized for each patient (Table 2). As recovery progresses, patients are typically able to participate in light tourism activities to enjoy the city and the local culture. Occasionally trips are extended if ongoing care is recommended. We typically

| Surgical Procedure | Best Candidate | Length of Procedure (h) | Recommended Time in Cartagena | Back to Work (wk) |
|--------------------|----------------|-------------------------|-------------------------------|------------------|
| Arm lift           | Excess and loose skin upper arms | 1.5 | 10 nights | 2 |
| Breast augmentation | Small breasts, lack of volume | 1 | 7 nights | 1–2 |
| Breast lift        | Sagging, poorly shaped breasts | 1.5 | 10 nights | 2 |
| Breast lift with implants | Sagging, poorly shaped breasts with lack of volume | 1.5 | 10 nights | 2 |
| Breast reduction   | Large, heavy, pendulous, or disproportionate breasts | 2 | 10 nights | 2 |
| Brow lift          | Sagging eyebrows, forehead creases, frown lines | 1.5 | 10 nights | 1–2 |
| Buttock augmentation | Lack of buttock volume or shape, good quality of fat available through liposuction | 2 | 8 nights | 1–2 |
| Buttock augmentation (fat grafting) | Lack of buttock volume or shape with low body fat | 2 | 21 nights | 3–4 |
| Chin augmentation  | Weak chin | 0.5 | 7 nights | 1–2 |
| Ear surgery        | Protruding or disproportionate ears | 2 | 7 nights | 1–2 |
| Eyelid surgery     | Excess fat or skin, bags, puffiness | 1 | 8 nights | 1–2 |
| Facelift/necklift  | Loose skin, deep lines, wrinkles, jowls, neck laxity | 3.5 | 10 nights | 2–3 |
| Facial fat grafting | Loss of facial volume | 1 | 7 nights | 1–2 |
| Labiaplasty        | Enlarged and protruding labia minora | 1 | 7 nights | 1–2 |
| Liposuction (360) | Isolated fatty areas with good quality skin | 2 | 8 nights | 1–2 |
| Posterior body lift | Sagging buttocks | 1.5 | 14 nights | 2–3 |
| Male breast reduction | Gynecomastia | 1 | 7 nights | 1–2 |
| Rhinoplasty        | Nose too large or wide, tip needs reshaping, deformity after trauma | 2 | 8 nights | 1–2 |
| Thigh lift         | Excess and loose skin thighs | 2 | 10 nights | 2–3 |
| Tummy tuck         | Protruding abdomen, excess fat and akin, skin damage (stretch marks), laxity abdominal wall | 1.5 | 14 nights | 2–3 |
follow-up patients through telemedicine at 1 month, 2 months, 6 months, and 1 year after surgery, though all patients have ongoing access to their surgeons and are instructed to contact us anytime with questions or concerns.

Numerous authors have expressed concern about the risks associated with patients traveling for medical procedures abroad, including the potential of receiving substandard care.14–16 We share this concern, though this is not specific to the medical tourism patient. Patient research is a key in choosing a plastic surgeon, and patients do the majority of their research online. The American Board of Plastic Surgery, the American Society of Plastic Surgeons, the American Society for Aesthetic Plastic Surgery, and the ISAPS consistently emphasize the importance of board certification in plastic surgery, as this assures patients that the surgeon has achieved rigorous training, examination, and professional standing. All of the major governing bodies in plastic surgery have released guidelines for patients seeking cosmetic surgery abroad, including the American Society of Plastic Surgeons, the American Society for Aesthetic Plastic Surgery, ISAPS, and the American College of Surgeons.17–20 The American Society of Plastic Surgeons has also signed formal “Global Partner” agreements with national plastic surgery societies around the world that have achieved a high standard in plastic surgery, providing patients with additional assurance regarding the quality of board-certified plastic surgeons in these partner countries.21

Colombia has become one of the most popular destinations in the world for plastic surgery medical tourism. ISAPS Global Statistics 2018 ranks Colombia as #9 in the world in regard to total plastic surgery procedures performed, #3 in surgical procedures performed per surgeon, and #2 in terms of medical tourism patients treated per surgeon.22 Aside from the skills of the surgeons themselves, Colombia possesses an established tourism industry, strong intellectual capital, and modern hospitals. The development of the health and wellness industry is a natural extension of that current infrastructure and the Colombian government has invested billions of dollars into improving the country’s medical infrastructure to provide a safe and tourist friendly environment for health travelers.22,23 The industry is government-led and private-sector-driven and aims to provide the tourist to Colombia with physical invigoration, mental rejuvenation, cultural enrichment, and spiritual elevation. Costs are often 30%–40% less than in the United States and the proximity of Colombia coupled with an abundance of convenient flights make travel easier than ever.24 The growth of international patients traveling to Colombia for plastic surgery has risen steadily over the past 8 years. The patient satisfaction level of 98% in this study indicates the potential for significant continued growth in this sector as a whole.

Alex Campbell, MD
Infinium, Cra 3, No 7-106
Cartagena, Colombia
E-mail: alexcampbellmd@gmail.com

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