Is Cosmetic Surgery Tourism Worth It? A Cost Analysis of Nontuberculous Mycobacterium Surgical Site Infections Contracted Abroad

James C. Lee, MD; Kerry A. Morrison, BS; Michelle M. Chang, BS; Jeffrey A. Ascherman, MD; Christine H. Rohde, MD, MPH

Disclosure/Financial Support: None of the authors has a financial interest in any of the products, devices, or drugs mentioned in this manuscript.

INTRODUCTION: Cosmetic surgery tourism has become increasingly popular despite many associated risks. Outbreaks of atypical mycobacterium surgical site infections in various countries have been particularly notable. While these difficult-to-treat infections are concerning to patients and providers, their economic impact is not well-defined in the literature. We sought to investigate the patient and healthcare system costs of such infections from cosmetic surgeries performed abroad.

METHODS: A retrospective review of all patients managed by the Plastic Surgery Division at Columbia University Medical Center from 2013 to 2014 with atypical mycobacterial surgical site infections following cosmetic surgery outside the United States was performed. Data including patient demographics, cost of travel and procedures, clinical course, impact on daily life, and costs associated with care of complications were collected using hospital billing information, patient questionnaires, telephone interviews, and clinical charts. Cost analysis was done to identify the personal and societal costs associated with these complications.

RESULTS: Data from ten patients were collected and analyzed. Management of mycobacterial infections cost an average of $96,949.81 in total medical charges. The opportunity cost of missed work was calculated to be $12,037.50 with a mean return-to-work time of 5.35 months. Total initial patient savings from having cosmetic surgery abroad was approximately $5,050, although this was cut to $3,419 when the cost of airfare and accommodations was considered. The total potential cost to the patient was estimated to be $109,587.31, although a portion is borne by insurers and healthcare providers. Although the incidence of mycobacterial infection abroad is unknown, the potential cost of contracting a mycobacterium infection alone outweighs the financial benefits of cosmetic tourism if the infection rate exceeds 3.12%. This value is even lower once all other risks of cosmetic surgery are taken into consideration.

CONCLUSION: Atypical mycobacterial infections as a result of cosmetic surgery abroad come at considerable cost to patients and the healthcare system. When the results of our study are taken into consideration with other risks of cosmetic surgery tourism including non-mycobacterium infections, intraoperative complications, pulmonary embolism, post-operative bleeding, and need for reoperation, we can conclude that the financial risks of cosmetic surgery tourism likely far outweigh the benefits. Our study serves as a platform to facilitate patient and policy discussions in mitigating the risks of cosmetic surgery abroad.