

Cost Analysis of Mohs Chemoresection Vs Total Surgical Excision: A Retrospective Review



UNIVERSITY OF MIAMI
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Sophia N. Liu, M.D., Prakash J. Mathew, M.D., MBA, Mahmood Al Bayati, M.D., Seth Spector, M.D., FACS, Seth R. Thaller, M.D., DMD, FACS
Division of Plastic Surgery, DeWitt Daughtry Family Department of Surgery, University of Miami Leonard M. Miller School of Medicine, Miami, FL
Department of Surgery, Bruce W. Carter VA Medical Center, Miami FL

VA



U.S. Department
of Veterans Affairs

Introduction

- Skin cancer risk is elevated in veterans, Caucasians, and men over the age of 50, which who comprise the majority of the patients at the Miami VA healthcare system.
- Treatments include total surgical excision (TSE) with frozen section (FS) or permanent pathology (PS), and Mohs surgery.
- At our institution, Mohs procedures are performed off site followed by reconstruction at the VA by plastic surgery.
- This retrospective study examines the difference in cost between TSE and Mohs surgery.

Methods

- Retrospective chart review was performed of VA patients who underwent either TSE or Mohs surgery with malignancy confirmed on pathology between 2017-2019
- Patients were subdivided into those who underwent Mohs off site followed by VA reconstruction or total surgical excision (TSE) with reconstruction at the VA.
- Mohs surgery at the off site institution was a contracted flat fee obtained from records in the Surgery Department
- Data included OR time (in minutes) for each case, as well as whether frozen section or permanent pathology was used in TSE.
- CPT code 88331 for frozen and 88305 for permanent.
- Cost per OR minute used previously published data for similar government owned, inpatient facilities
- Pathology costs were determined using Medicare fees specific to our institution.

Results

- Of 130 patients 82 underwent TSE and 48 underwent Mohs with reconstruction.
- Cost per OR minute for inpatient government owned facilities was determined to be \$37.94.
- An average flat fee of \$1400 for the Mohs surgery was used in the calculation.
- The average cost of Mohs surgery followed by reconstruction was \$3534.12. Average cost of TSE with pathology was \$2643.85.
- TSE was significantly more cost efficient than Mohs with reconstruction ($p < 0.01$).
- 33% more patients could be treated with TSE compared to Mohs for the same cost.

Mohs vs. TSE Cost Comparison by Percentage



Conclusions

- At our institution, TSE is more cost effective than Mohs with subsequent reconstruction.
- While these are generalized costs, and data specific to our institution, cost efficiency is an important consideration in improving the value of care for VA patients.
- Similar analysis should be performed at other institutions to assess the overall cost effectiveness of these two strategies in light of ever-dwindling healthcare budgets.
- There are intangible costs of waiting for reconstruction after Mohs surgery for our patient population which should also be examined in future works.