Cost-Effective Treatment of Basal Cell Carcinoma: Moh's surgery or Surgical Excision?

Abstract:

Introduction:

Basal cell carcinoma (BCC) is the most common adult skin cancer and is treated with either Moh's surgery or surgical excision with frozen section. Both can be safely performed by experienced physicians and result in a similar high quality of care with low recurrence. However, with an increasing focus on economic considerations, the question arose as to which modality was the most cost-effective.

Hypothesis:

In our tertiary care setting, we hypothesized that outpatient treatment of basal cell carcinoma with excision would be less costly than Moh's surgery.

Methods:

Using representative ICD-9 codes for basal cell cancer and relevant CPT codes for Moh's surgery and surgical excision, financial information was collected on all outpatient cases from January 2010 to January 2012.

Results:

There were 315 Moh's surgery completed by the Department of Dermatology and 78 surgical excisions completed by the Division of Plastic Surgery in the two-year period. The average charge was \$8433.63 for Moh's surgery and \$6443.95 for surgical excision. Average total cost was \$2071.22 for Moh's and \$1678.13 for surgical excision. Average payment for Moh's was \$2218.92 and \$1914.78 for surgical excision. Average profit for Moh's was \$147.70 and \$236.65 for excision.

Discussion:

The current study attempts to define the profit and loss statement for treatment of BCC at our institution. With this data, we would suggest that a stricter adherence to indications for Moh's surgery would result in greater profits to the institution. The next step in this research will be to look at costs of reconstruction and patient satisfaction as those also factor into the decision making process.

Conclusion:

For outpatient treatment of basal cell skin cancer at our tertiary care hospital, surgical excision is less costly and has a higher profit than Moh's surgery.

¹Mosterd K, Krekels GA, Nieman FH, Ostertag JU, Essers BA, Dirksen CD, Steijlen PM, Vermeulen A, Neumann H, Kelleners-Smeets NW. Surgical excision versus Mohs' micrographic surgery for primary and recurrent basal-cell carcinoma of the face: a prospective randomised controlled trial with 5-years' follow-up. Lancet Oncol. 2008 Dec;9(12):1149-56.