Operative Versus Non-operative Staging for Head and Neck Cancer

Sreekrishna Donepudi, MD1; Adrienne Childers, BS1; Michael Baddour, BS1; Merry Sebelik, MD1,2

1University of Tennessee Health Science Center, Memphis, TN; 2Veterans Affairs Medical Center, Memphis, TN

INTRODUCTION

Staging

Number

Comments

A total of 192 cases of newly-diagnosed head and neck cancer were reviewed. Of these, 21 cases were staged differently when data gained operatively was included compared to using only non-operative data with a staging discrepancy rate of 10.9%. All 21 cases had their staging increased to a more advanced stage with operative data. Please see Table 1 for the types and frequency of discrepancies encountered. The oropharynx had the highest discrepancy rate likely due to the tendency for tonsil and base of tongue tumors to be submucosal and difficult to assess by physical exam. Surprisingly, oral cavity tumors had a high discrepancy rate as well. Pain, trismus, and dental artifacts on imaging are obstacles to accurate non-operative staging. The lower discrepancy rate in the larynx and hypopharynx supports non-operative staging in selected cases where the physical examination and imaging are reliable, tissue is available via needle or endoscopic biopsy, and considering the airway risk in these patients. The oropharynx followed by the oral cavity had the greatest incidence of staging discrepancies in the larynx and hypopharynx.

RESULTS

Larynx

Nasopharynx

Oropharynx

Salivary Glands

Unknown

2.1%

2.1%

1.5%

4.0%

1.0%

2.1%

1.5%

1.5%

1.5%

1.5%