

**DOMINICAN HOSPITAL  
ESOPHAGEAL CANCER STUDY  
Patterns of Care and Treatment Compared to Published Treatment Guidelines**

Study coordinator: Michael Alexander, MD., Jessica Johnson, CTR

Study population: Invasive esophageal cancer patients diagnosed and/or treated at Dominican Hospital between 2013-2016

Total number: 8 cases

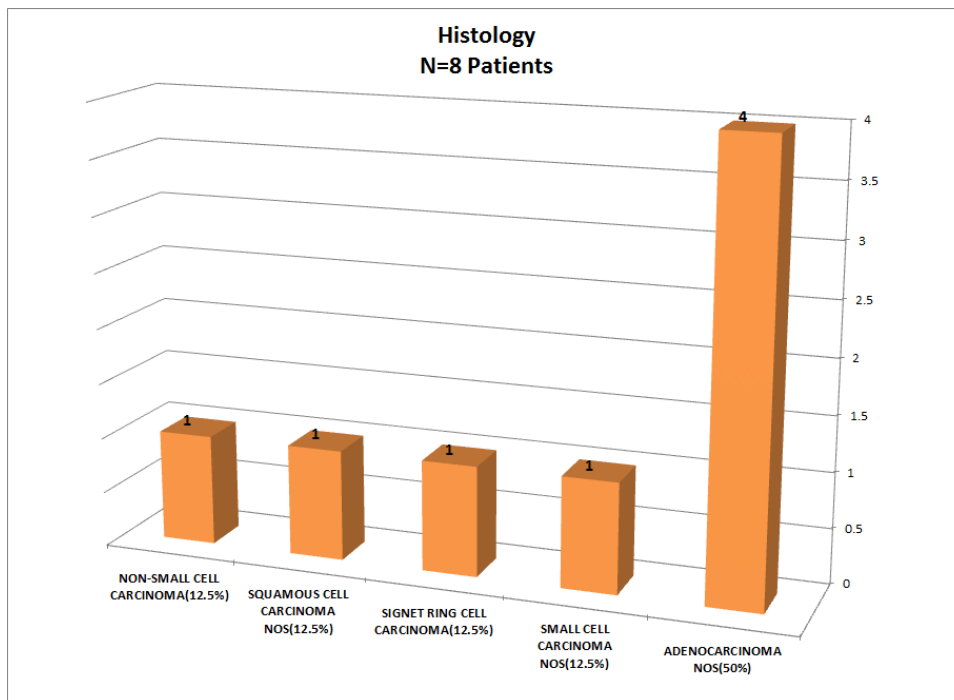
**INTRODUCTION**

*About 17,000 new cases of esophageal cancer will be diagnosed in 2017. Men are 4 times more likely to develop this disease than women. Although there has been significant progress in treatment for esophageal cancer, only 20% of patients will survive at least 5 years from diagnosis, up from 5% between 1960 to 1970.*

*In this study, we looked at esophageal cancer treated at Dominican Hospital between 2013- 2016. Neoadjuvant chemoradiotherapy prior to surgery has increasingly become a preferred option in the United States. We decided to see how often this approach was utilized in appropriate patients. We also planned to evaluate how often endoscopic ultrasound was used in pre-therapy staging.*

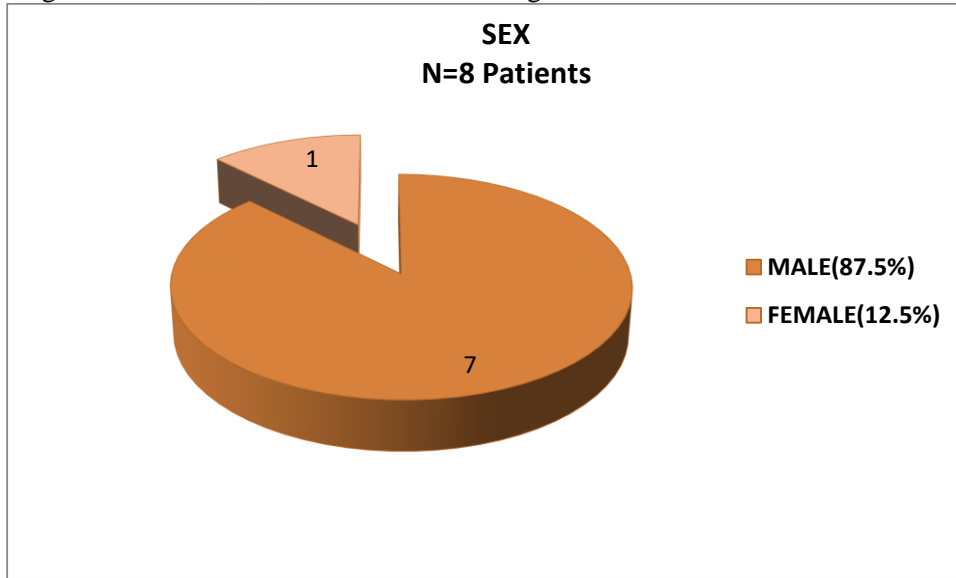
**HISTOLOGIC TYPES OF CANCER**

The most common types of esophageal malignancies are Adenocarcinomas and Squamous Cell Carcinomas. These accounted for the majority of cases diagnosed at Dominican. 1 patient presented with Small Cell Carcinoma and 1 patient presented with Non-Small Cell Carcinoma on a celiac lymph node biopsy in which Adenocarcinoma or Squamous cell carcinoma could not be determined.



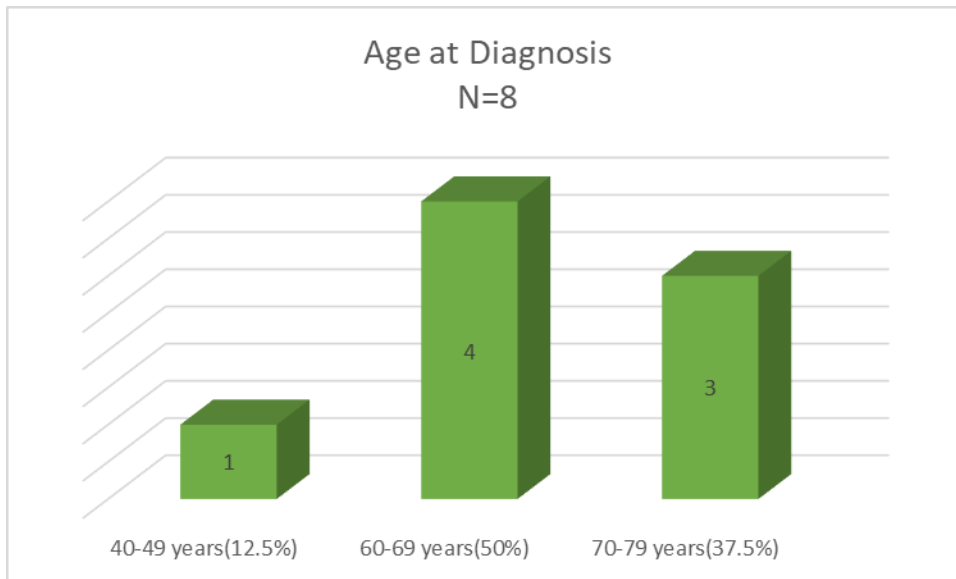
**SEX**

Esophageal cancer incidence is 4 times higher in males than females. In this cohort, 8/9 patients diagnosed were male, in-line with U.S averages.



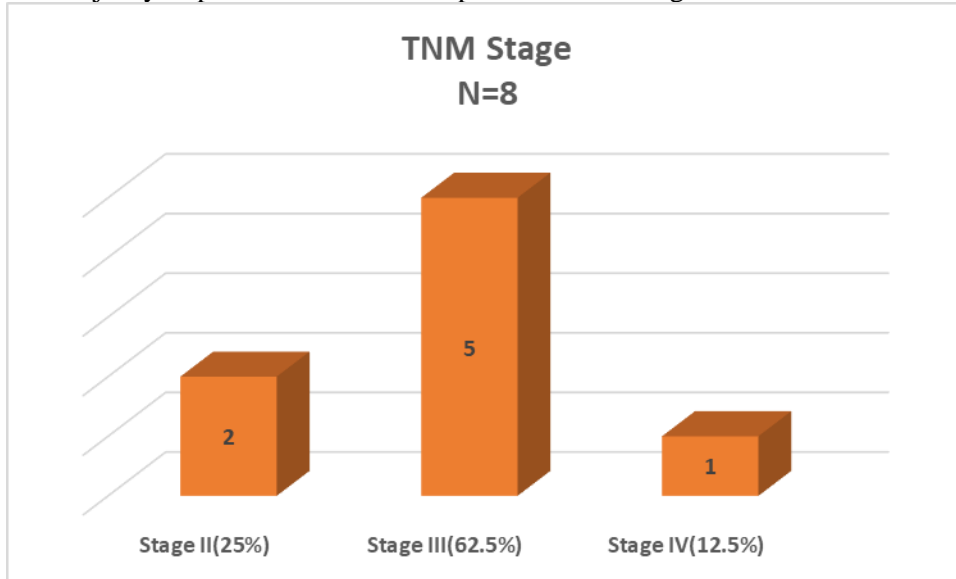
**AGE AT DIAGNOSIS**

The majority of new esophageal cancer cases occur in people 60 years of age or older. The median age at diagnosis was 65.



**STAGE OF DISEASE**

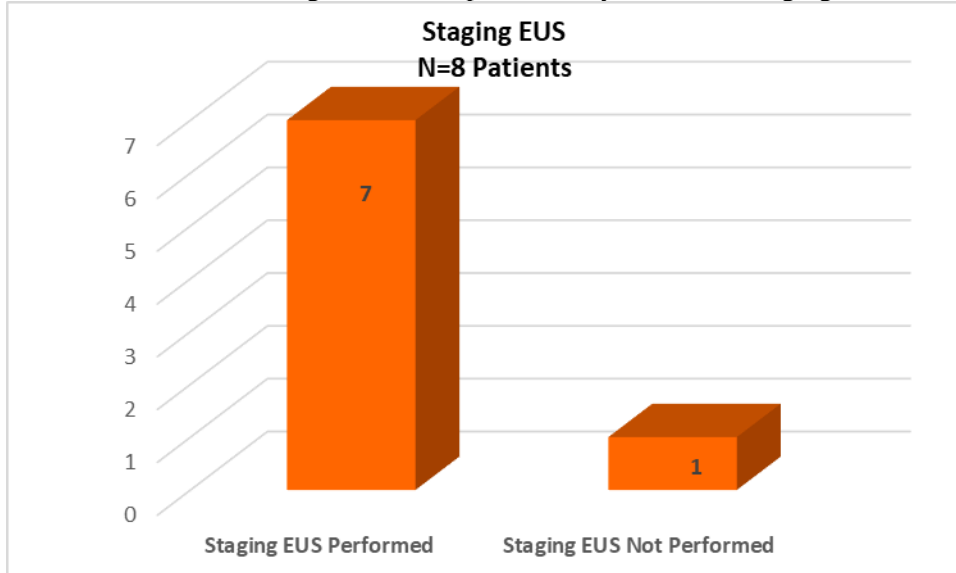
The majority of patients in this cohort presented with stage III and IV disease.



**WORKUP**

\*The NCCN describes endoscopic ultrasound (EUS) as “important in the diagnosis, staging and treatment of esophageal cancer”. Careful attention to ultrasound images provides evidence of depth of tumor invasion (T designation), presence of abnormal or enlarged lymph nodes likely to harbor cancer, (N designation), and occasionally signs of distant spread, such as lesions in surrounding organs (M designation).

7 of the 8 patients in this cohort were properly staged by EUS. The 1 patient not having EUS had brain metastases resected at diagnosis and expired shortly after-EUS staging was not indicated.



## **NCCN TREATMENT GUIDELINES FOR ESOPHAGEAL CANCER:**

\*For the purpose of this study, we will focus on only those patients that had all of their treatment and pre-treatment workup at our facility, for a total of 5 patients (2 patients migrated out of the Dignity network, 1 patient had brain mets and died shortly after).

\*The 5 patients remaining in this cohort: 1 presented with SCCA, 1 patient had nonsmall cell ca., and 3 with Adenocarcinoma.

**NCCN Guidelines recommend consideration of neoadjuvant chemoradiotherapy for stage cT1b-T4a (includes all stage II and III)**

*or*

**definitive chemoradiation therapy (for patients who decline surgery)**

*or*

**neoadjuvant chemotherapy followed by esophagectomy.**

### **5 Remaining patients in cohort: (2/5 with stage II Disease; 3/5 with stage III disease:**

1/5 patients presented with stage III disease and had significant co-morbidities contraindicating treatment-referred to hospice.

3/5 patients had neoadjuvant chemotherapy followed by esophagectomy

1/5 patients had neoadjuvant chemo with recommended esophagectomy but developed intra-abdominal metastasis following completion of chemo-no surgery done.

### **FINDINGS:**

Of the 8 cases in this study, all appropriate patients (7/7) had EUS staging completed prior to definitive treatment (1 presented with stage IV disease and EUS staging was not indicated)

1 patient had significant co-morbidities and treatment was contraindicated. 2 patients were diagnosed here but migrated out of the Dignity system and were lost to follow-up. That left 5 patients diagnosed and treated at DSC. All patients that met criteria for treatment, were treated according to NCCN guidelines (see above discussion).

### **SUMMARY:**

Guidelines for neoadjuvant therapy were met in all eligible patients. All appropriate patients had EUS prior to treatment.

### **RECOMMENDATIONS:**

None needed, findings satisfactory.

### **FOLLOW-UP**

None needed, findings satisfactory.

### **REFERENCES:**

<https://www.cancer.org/cancer/esophagus-cancer.html>

[https://www.nccn.org/professionals/physician\\_gls/pdf/esophageal.pdf](https://www.nccn.org/professionals/physician_gls/pdf/esophageal.pdf)