

Esophageal Squamous Cell Carcinoma Diagnosis and Management

Esophageal squamous cell carcinoma is primarily diagnosed by endoscopy with biopsy. A barium swallow can also be used, and will reveal a classic "apple core" appearance. Ultrasound and CT are other imaging modalities that can be used for diagnosis. Chemotherapy with radiation can be used for high grade, metastatic lesions whereas surgery is indicated for lesions confined to the esophagus or with minimal invasion. Complications include esophageal stenosis and tracheoesophageal fistula. Unfortunately, this disease has a poor prognosis.



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Diagnosis

Endoscopy with Biopsy

Endoscopy and Biopsy-needle

Endoscopy is mandatory and is used to visualize the neoplasia as well as to obtain a biopsy sample.

Barium Swallow

Swallow with Berries

A barium swallow is typically performed first in the workup for this type of neoplasia.

"Apple Core" Appearance

Apple Cores

On a barium swallow, the imaging findings resemble an apple core. This occurs because the tumor invades the esophageal lumen creating a narrow path for the barium to progress. The "core" shows the barium that has progressed through the narrow lumen and the darker shaded part shows the surrounding tumor.

Ultrasound

Ultrasound-machine

Endoscopic ultrasound is often used for staging.

CT Scan

Cat Scanner

A CT scan is used to evaluate the characteristics of the neoplasia, the degree of invasion into the surrounding tissues, and the presence of distant metastases. These factors ultimately help in staging the tumor.

Management

Chemotherapy and Radiation

Chemo-head-wrap and Radiation-radio

Chemotherapy and Radiation are used to treat this neoplasm. Chemotherapeutic regimen varies from patient to patient. Locally metastatic disease is typically managed with 5-fluorouracil in combination with radiation.

Surgery

Surgeon

Surgical resection is the only definitive treatment in cases in which the disease is localized only to the esophagus or minimally invasive.

Considerations

Esophageal Stenosis

[Esophagus-Sarcophagus Stone Stenosis](#)

Esophageal stenosis is a serious complication of long-standing inflammation since the tumor invades both the cell layers lining the esophagus as well as its lumen.

Tracheoesophageal Fistula (TEF)

[Trachea-sarcophagus Fist-tunnel](#)

The tumor can invade adjacent tissues such as the trachea or even the bronchi. As barriers are eroded, fistulae can develop. Clinical signs of TEF include dry cough and hemoptysis.

Poor Prognosis

[Gravestone](#)

The prognosis is typically grave. Patients typically present in advanced stages of the disease and the five year survival rate is estimated to be between 5-20%.
