Locally-Advanced Adenocarcinoma of the Esophagus

Introduction

I'm Dr Jonathan Salo, a GI Cancer Surgeon in Charlotte, North Carolina.

If you're viewing this video, chances are that you or someone close to you has encountered esophageal cancer and is contemplating treatment.

This video focuses on *locally advanced* adenocarcinoma of the esophagus. This is defined as T3 or Node-positive esophageal cancer without evidence of distant metastasis.

Most patients in this category have some difficulty with eating.

If that terminology is unfamiliar, we have a link to a video on Diagnosis and Staging.

Esophageal Cancer Treatment Options

For a refresher, we have four major categories of esophageal cancers:

- Superficial: T1a tumors - Treated without surgery
- Localized: T1b to T2 tumors - Treated with surgery alone
- Locally Advanced: T3 or N1 - subject of this video
- Metastatic cancers: M1 - Treated with Chemotherapy

This video focuses on *Locally Advanced* esophageal cancer

Types of Esophageal Cancer

There are two types of esophageal cancer:

adenocarcinoma

squamous cell carcinoma

The treatment of these two types is similar, but there are differences.

We're preparing a separate video for locally-advanced squamous cell carcinoma.

Tumor

To review the terminology: A *tumor* is an abnormal mass or lump

A benign tumor may grow slowly over time but will never spread

A malignant tumor has the potential to spread to other parts of the body.

Cancer is another term for a malignancy tumor.

Esophageal Cancer Staging

The cancer stage consists of three parts:

- **T** = Tumor - We're talking about the size of the tumor and the depth of invasion into the wall of the esophagus
- **N** = Nodes - Has the cancer spread to the nearby lymph nodes?
- **M** = Metastasis - Has the cancer spread to other parts of the body? lungs or liver?

Locally-advanced Cancers

Most locally advanced cancers are T3, which means they have grown all the way through the wall of the esophagus.

These tumors frequently cause trouble eating. cancers are those that have gorwn through the wall of the esophagus.

Lymph Nodes

In some cases, cancer cells can break off from the main tumor and spread to lymph nodes

If the lymph nodes contain enough cancer cells, they can be seen on CT scans or PET scans

Treatment of these cancers requires treating cancer cells in the nodes as well as in the esophagus

M Stage

Locally-advanced cancers are localized to the esophagus and nearby lymph nodes and have *not* spread to other parts of the body such as the lungs or liver.

Locally-Advanced Cancers

To summarize, locally-advanced cancers are T3, can be either N0 or N1, and are M0

Staging Tests

Common staging tests include:

- CT scan
- PET scan
- Laparoscopy in some cases

PET scan

PET scan is similar to a CT scan and is the best test to see whether there is spread of cancer to lymph nodes.

Because PET scans are expensive, the insurance plan will frequently require that a CT scan be done before a PET scan will be approved.

Treatment

Locally-advanced cancers can spread to nearby lymph nodes. In early stages, the cancer in the lymph nodes is too small to be seen on scans or with the naked eye.

In the past, surgery was the only treatment for esophageal cancer.

When surgery is the only treatment, there is a risk that cancer cells can be left behind.

Preoperative Therapy

Preoperative therapy uses chemotherapy with or without radiation before surgery to shrink the tumor and kill microscopic areas of cancer nearby

Surgery

Surgery is then performed after preoperative therapy

Preoperative Therapy

Preoperative therapy before surgery is designed to reduce the risk that any cancer cells are left behind after surgery

Surgery then reconstructs the GI tract, usually using the stomach to make a new esopahgus.

Preoperative Therapy

There are two different strategies for preoperative therapy:

In the first, chemotherapy and radiation are given together for six weeks prior to surgery

In the second, chemotherapy is given both before and after surgery.

ChemoRT -> Surgery

Treatment with chemotherapy and radiation is referred to as "CROSS" treatment

Radiation is given 5 days per week for six weeks

Chemotherapy is given along with the radiation once weekly for six weeks.

A PET scan is done 4 to 6 weeks after the end of radiation

Surgery is performed a few weeks later

CROSS

This strategy was studied by medical researchers during the CROSS clinical trial

363 patients with locally-advanced esophageal cancer were treated with one of two treatment strategies:

- Surgery alone OR
- Chemotherapy and radiation (administered together) followed by surgery

There were better outcomes with chemotherapy and radiation followed by surgery, compared with surgery alone

FLOT

The other strategy for preoperative therapy is chemotherapy followed by surgery followed by additional chemotherapy

Treatment starts with chemotherapy every other week for 4 doses

A CT scan is done after finishing chemotherapy

Surgery is then performed a few weeks later

An additional 4 doses of chemotherapy are then given after surgery

CROSS vs FLOT

To summarize, CROSS treatment starts with a combination of radiation and chemotherapy prior to surgery

FLOT treatment starts with chemotherapy prior to surgery

CROSS

With CROSS therapy, the dose of chemotherapy is low, which minimizes side effects.

The radiation can lead to a "sunburn" on the inside of the esophagus called radiation esophagitis

This means that swallowing can get worse before it gets better. Typically, the last two weeks of radiation are the worst.

The good news is that eating is usually much easier 2 weeks after the end of radiation, as the tumor has begun to shrink and the inflammation in the esophagus caused by the radiation gets better

FLOT

FLOT chemotherapy uses higher doses of chemotherapy

But because there is no radiation, swallowing doesn't get any worse during therapy.

FLOT chemotherapy is usually a better choice for younger, fit patients without medical problems.

Paitients getting CROSS therapy are a bit more likely to need a feeding tube to help them get through therapy,

While patients getting FLOT are a bit less likely to need a feeding tube

IV Access

The chemotherapy for CROSS can be administered by peripheral IV or a port

While FLOT chemotherapy requires a port for administration

We will provide a link to a separate video about intravenous ports

More Topics

Other questions for you to discuss with your cancer care team?

- Do I need a port for intravenous access for chemotherapy?
- How will I maintain my nutrition during therapy?
- Will I need a feeding tube?
- What does surgery involve?

If you or a family member have had an encounter with esophageal cancer surgery, I would love to hear about your experience, so please take a minute to leave a comment below. We're constantly creating new videos, so please subscribe to be notified of new videos when we post them.

I hope you have found this video helpful. This videos and others like it are designed to educate patients and families about esophageal cancer
and equip them for their discussions with their esophageal cancer care team.
As always, these videos are no substitute for expert medical advice.

Feel free to leave a comment or a question, or if you have suggestions for future videos.
Here are some additional videos you may find helpful:
Surgery for Esophageal Cancer