Esophageal Cancer Trimodality Therapy

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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 patients with locally advanced esophageal cancer. This is defined as T3 or Node-positive esophageal cancer.

If that terminology is unfamiliar or you haven't seen our video on Esophageal Cancer Treatment Options video, a link is provided in the description.

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

Superficial -> Treated without surgery Localized -> Treated with surgery alone Locally Advanced -> Chemotherapy + Radiation -> Surgery Metastatic -> Chemotherapy

We're going to focus on two categories: localized and locally advanced

This drawing shows an early-stage tumor which would be a candidate for primary surgery: Either T1b or T2, these tumors invade to far into the wall of the esophagus to be treated with endoscopic therapy. The lymph nodes are N0, which means there is no signs of spread to the lymph nodes —

This shows a locally-advanced tumor which is either T3 or has positive nodes, meaning N1 or N2 or N3 These tumors are best treated by a combination of chemotherapy and radiation, followed by surgery —

Localized tumors are T2N0

R0 92% vs 69%

ECOG 0-2

5 yr survival $34\% \rightarrow 45\%$

 $24\text{mo} \rightarrow 40\text{months}$ median

We have a collection of videos that talk about esophageal cancer and how it is treated, so be sure to look in the description below for other videos. Chemo

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Pneumonia

Pneumonia can occur after esophagectomy, due in part to fact that esophagus is close to the right lung. We have evidence that the risk of pneumonia is related to the muscle strength. We have a video that talks about how you can increase your muscle strength before surgery in order to reduce the risk of pneumonia.

Anastomotic Leak

In most cases, the new connection between the esophagus and stomach, called the anastomosis, heals well. If connection does not heal properly, this can cause a leakage of fluid from inside the esophagus. This is called an anastomotic leak. In some cases, the leak will heal on its own, but other cases may require additional procedures or even surgery.

The rate of leak depends upon a number of factors, but one of them is the surgeon. Practice makes perfect, and surgeons who perform an esophagectomy frequently seem to have a lower risk of a leak than surgeons who don't perform the operation as frequently.

One of the things you will want to ask your surgeon is about how frequently their patients experience a leak.

Understanding Outcomes

.pull-left[Let's talk Baseball for a minute. If you want to evaluate how a team is doing, you look at the scoreboard]
[pull-right]
.pull-left[If you want to evaluate a baseball player, you look at their batting average] .pull-right[]
.pull-left[Micky Mantle is regarded as one of baseball's greats, and this baseball card from 1952 is one of the
most valuable in history.] .pull-right[]
.pull-left[If you look at the back of his card, you'll find lost of statistics, including his batting average] .pull-right[]
Unfortunately, there aren't baseball cards for hospitals and surgeons, and finding the statistics for a hospital or surgeon can be a challenge, but it's still important if you want the best chance for a good outcome after surgery.

Hospital Volume

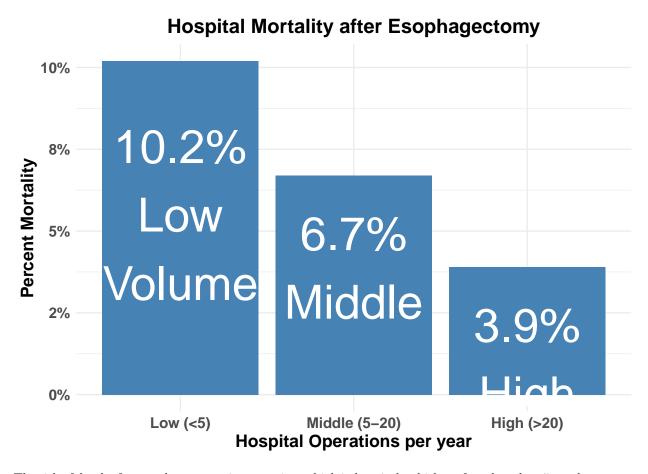
Practice makes perfect in many things in life, and esophageal surgery is no exception.

Hospitals where an esophagectomy is performed more frequently in general have better outcomes than hospitals where the operation is only occasionally done.

Death

An esophagectomy is a substantial operation. It is unusual, but in some cases complications after surgery can result in death.

This chart shows the relationship between hospital volume and the risk of death after esophagectomy.



The risk of death after esophagectomy is over twice as high in hospitals which perform less than 5 esophagectomy operations per year compared with those that perform more than 20 per year.

Finding a Hospital

The easiest way to find out whether a particular hospital is high volume or low volume is to ask your surgeon or one of your doctors.

Another method is to do some research on the internet. The Leapfrog Group is a non-profit organization that collects and published safety in healthcare. Their website ranks hospitals for safety and can help you find a high-volume hospital. A link to their website found in the comments below. HospitalSafetyGrade.org

Leapfrog Group Website

You can search on a hospital. Once there, click "View this hospital's leapfrog Hospital Survey Results"

Of course there are low-volume hospital that have good outcomes, but starting with a high-volume hospital is a place to start.

Choosing a Surgeon

The surgeon is another key factor in the outcome of an operation. The Leapfrog group recommends a minimum of seven operations per year for surgeons undertaking esophagectomy.

The surgeon's track record of outcomes is also an extremely helpful way to predict outcomes. Finding out this information may require some uncomfortable questions, but this is important information. It is critical to know both what the track record of the hospital is, but also the track record of a particular surgeon.

Your Surgeon's Outcomes

Knowing your surgeon's outcomes is important, but knowing your surgeon's outcomes is probably more important. Your surgeon should be able to tell you what their statistics are for outcomes like anastomotic leak, pneumonia, and death after surgery.

#Statistics

If your surgeon doesn't know their personal statistics, you may want tolook for a second opinion. After all, if you met a professional baseball player, you would expect that they would be familiar with their batting average.

Questions for Your Surgeon

- 1. How many esophagectomy operations are performed each year in your hospital?
- 2. How many esophagectomy operations do you perform personally each year?
- 3. What are your overall rates of complications?
- Pneumonia
- Anastomotic Leak
- Death in the first 90 days after surgery

I would love to hear you comments about this video, so please leave a comment below. If you are contemplating an esophagectomy, please let us know how you chose a surgeon and a hospital.

We're constantly creating new videos, so please subscribe to be notified of new videos when we post them.