

## The Sentinel

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Authors' disclosures of potential conflicts of interest and author contributions are found at the end of this article.

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“Tell me how I will die.”

He has an enormous anaplastic thyroid cancer that is noticeably larger today than yesterday—“growing audibly,” as we sometimes like to say. The computed tomography scan shows innumerable lung metastases. His voice is breathy. He is sitting up in the hospital bed and any exertion disturbs his breathing. There is an ominously familiar odor in the air. Over the past few hours, he has just now begun to grasp that his is no ordinary cancer. His voice and face betray his anxiety.

“I mean what will kill me? What will happen?”

Because of my own anxiety, I retreat to familiar ground to answer. Most of my patients who have no realistic treatment options are dying from recurrent squamous carcinomas; the conversation with them centers on maintaining the airway, reversing nutritional depletion, and providing support as the metastatic disease progresses. Anaplastic thyroid cancer shares these attributes, but it is dramatically more aggressive. These are turbocharged cancers on steroids. Disturbing and unwelcome memories well up in me as we talk; I feel a knot in my gut as I recall previous encounters with these unresponsive, destructive, and rapidly fatal tumors. Indeed, several of my patients never left the hospital once the diagnosis had been confirmed.

So, to begin with, I slip into my standard speech that describes what we can do to help any head and neck cancer patient. At the same time, my mind scans forward, anticipating his unusually challenging surgical procedure.

“Well, first of all, I suggest that we perform a tracheotomy this week to make certain that you are able to breathe safely even if the cancer continues to grow. Since you are starting to have more trouble swallowing, I will also help arrange for a feeding tube so you will never have to worry about being able to get enough nutrition and medications.”

My gaze shifts back and forth between his eyes and his distorted neck. I am amazed to find that the mass has clearly enlarged since the day he had been admitted; it reminds me of the overflowing pouch a child might use to contain an ever-growing collection of marbles. I start running through mental checklists. One recurrent laryngeal nerve is already paralyzed. If the tumor knocks out the other nerve,

his distress will intensify. He will certainly be difficult to anesthetize. We will have to excavate through several centimeters of tumor just to find his trachea. The scan confirms that there are large vessels within the mass.

“So if you take care of the breathing and the nutrition, how do the metastases kill you?”

His question snaps me back to the present. A close relative of his died earlier in the week of extensive cancer. He is frustrated and guilt-ridden that the rest of the family is occupied making arrangements for the funeral while still following his evolving circumstances. My patient will have to miss the memorial service while recovering from the planned procedures. The entire family is reeling.

“Well, many of my patients with metastases just get more and more tired. They eventually spend lots of time in bed and often just fall asleep. Our whole team works with you and your family.”

Abruptly, he relaxes and, although still sitting nearly upright, closes his eyes.

As he does so, I chide myself for omitting another distinct possibility from the discussion. These tumors are more than capable of attacking and invading major blood vessels. When the common carotid artery suddenly ruptures, everything in the vicinity—the patient, the room, the bed, the mirror, the furniture, and the caregivers—is rapidly covered with blood as though sprayed from a renegade fire hose. Traditionally, we were taught that the severe morbidity and mortality rates from emergent carotid rupture and ligation exceeded 85%.<sup>1</sup> Perhaps the outcome is better these days with modern interventional techniques. Even still, a survivor might spend the rest of his or her life with a dense paralysis. And, of course, there is still the issue of the relentless cancer.

How do I tell him that he might suddenly begin disgorging immense volumes of his own blood and that there isn't much we can do about it? A “sentinel bleed” often heralds the impending rupture minutes (hours or days?) before the catastrophic event itself. How do I present *this* possibility? Would the specter of death from exsanguination be enough to send ripples of terror through him every time he notices a drop of blood in the suction catheter?

He rests quietly. He has disengaged from the conversation for now. I breathe in the sickly sweet

odor of his necrotic, voracious cancer while searching for the right combination of words that will provide some measure of comfort, yet suitably warn him what his body might be planning if he unexpectedly disgorges a blindingly bright torrent of blood. I furtively explore all of the dusty, dark corners where I store memory of past encounters and my mentors' advice. Time ticks by. I hold my breath and shift in the chair. He remains quiet and peaceful, eyes nearly shut, his head bobbing slightly. I exhale quietly. I clench my teeth, shake my head, curse myself for not knowing what to do, and remain silent.

### **Editor's Note**

A commentary on this article follows on pages 1762-1763.

### **AUTHOR'S DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST**

The author(s) indicated no potential conflicts of interest.

### **REFERENCE**

1. Moore OS, Karlan M, Sigler L: Factors influencing the safety of carotid ligation. *Am J Surg* 118:666-668, 1969

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