Orange You Glad I Didn’t Say Heart Attack

Kathy Marshal

Imagining home! My heart is FINE!

She can’t go home! But no matter how I explain it to the patient, she doesn’t understand! How am I going to explain this to my attending?

Patient vs. med student

Medical student! How’s your patient?

She wants to talk to you! She doesn’t understand why she has to stay when her symptoms are improving.

She won’t listen to me! She doesn’t get the potential severity of chest pain!

Once you learn to speak, sometimes it’s hard to explain things.

STOP!
Now that the patient is stabilized, let's walk through her workup and put cardiac chest pain into words a patient can understand!

And let's use this orange aop prop to explain!

great idea!

I have no clue what he's talking about.

So your patient came in with pain in her chest radiating to her jaw, that began while exercising.

We did an EKG, which was...?

Normal!

I'm still not sure how the orange fits into all this, but I'm not about to ask.

Then we draw blood to see if there are any cardiac proteins in the blood.

In my mind, needles are always B-I-G!

Normal EKG. Blood work negative. No cardiac chest pain.

Normal EKG. Blood work negative. No cardiac chest pain.

Wrong!!!

Happy New Year! Whoopee!!!

Troponin are proteins found in heart muscle. When the heart is damaged, as in a heart attack, troponine leak out of cells and into the blood stream.

LAD = left anterior descending, RCA = right coronary. LAD = left anterior descending.
LCS = superior vena cava; IVC = inferior vena cava; PA = pulmonary artery; RV = right ventricle; LV = left ventricle.
So, no troponins in the blood = no damage to the heart, right?

Wrong.

What if I squeeze this orange with all my might?

Wrong!

What if I hurl it onto the ground?

Because even if the patient's bloodwork is normal that doesn't mean the heart is healthy.

Now look at this orange. It looks okay. Nothing leaked out so no damage right?

Exactly! Even though no juice leaked out of the orange or there are no troponins in the blood, there may still be damage that we can't see! We need to do a stress echocardiogram, so explain that to the patient!

A stress what? You're making me stressed!!

AAAhh!!