



CardioRisk Laboratories

At the Heart of Good Health

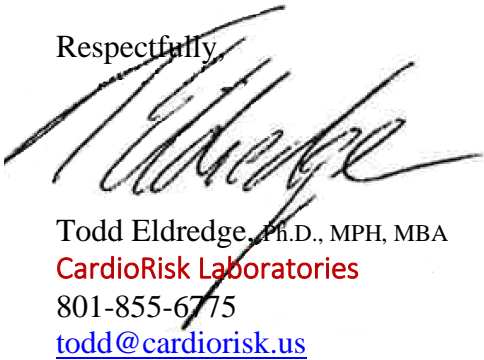
♥ DETECT
♥ ASSESS
♥ PREVENT

Dr. Ralph Sutherlin
Valerie Sutherlin
2200 East Warm Springs Avenue, Suite 102
Boise, ID 83712
Re: Patient Martha Turner

August 30, 2019

This patient was scanned on July 5 of 2019. The information below represents that information we were able to derive from the images. Information regarding important clinical finders and regarding the nature of each of the images provided appears below. Please let us know if you have any additional questions or concerns.

Respectfully,



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Notes on Image Quality:

- The first image is labeled R5 it's a good valid image with good interfaces.
- The second image R2 is a valid image. It is not a good image because we can't see the far wall interface, extending beyond about a half, or maybe $\frac{3}{4}$ of a centimeter. You could fix this image by a slight rocking motion, opening that back up. It's a valid image and we can certainly get a measurement on it.
- The image labeled R8 is a good and valid image we can see both the near and the far wall interfaces very clearly. Well done.
- The image labeled RCCA is a replica of the image labeled R8, it is a good and valid image.
- The image labeled RCB is a good and valid image. We can see possible pathology in both near and far walls. The arrow is indicating the origin of the internal carotid. So, it's actually pointing to pathology in the internal carotid. If you look just to the right of that arrow, in the area of interest, you can see the origin of the bifurcation; there's a very clear atherosclerotic lesion, it may not be plaque yet by its size. But also, if you look at the near wall, you can see a thicker area, I believe that's a pretty clear LI MA interface.

Early Detection of Cardio-Vascular Disease..."before it's too late"





- The image labeled RCB-T is a transverse of the bifurcation. While your arrow is pointing to the far wall, you can see the possible pathology in the near wall. I would recommend re-scanning this patient to explore both the near wall lesion and the far wall. It appears clear to me that there's probable pathology. It may not be quite to the size of 1.3mm yet but it's definitely atherosclerotic, you can see fatty streaks and it's a really good image. The thickest interface is that far wall right at the origin of the bifurcation.
- The image labeled RICA is a valid image. You could improve this image by using the heel-toe maneuver to make the internal carotid more horizontal. Right now, you can see that it points downward and to the left and we would like that segment to be horizontal. Then we don't care that the common carotid would point downward and to the right if you did that heel-toe maneuver.
- The image labeled RICA-T is invalid. We don't have an interface and we really cannot see that you're in the internal carotid here. This image can be improved by a rocking motion and centering your image. You can see that it's kind of in the bottom left hand of the screen. You can center the image by shifting the transducer on the patients neck so that the area of interest moves to the center of the screen.
- The image labeled L5 is a good and valid image. We have good interfaces.
- The image labeled L2 is a good and valid image. This image could be improved by a slight heel-toe maneuver and a slight rocking motion so that the LI and MA interface extend completely from the origin of the bifurcation, approximately into the internal carotid. But I've got enough that we can measure, it's a valid image, just always looking for ways to improve.
- The image labeled L8 is a valid image. Your calipers are well into the common carotid. You can see the origin of the bifurcation most clearly in the near wall. But if you look closely you can see it in the far wall as well. It's a valid image and we can use those measurements, you've got both the near and far wall.
- The image labeled LCCA is a good and valid image. I believe the area of interest that we want to highlight and measure is actually quite a bit to the left of where your calipers are marked, as opposed to the right. You can see that the near wall looks like the thickest to me and it's got a fatty streak in there. Mild amount of inflammation on the left side for this patient.
- The image labeled LCB is a good and valid image. We have good interface of that far wall where we see an atherosclerotic lesion. It's probably not large enough to be a plaque but certainly atherosclerotic. We can see the fatty streak in the center of the pathology there. Modest amount of inflammation here.
- The corresponding transverse image labeled LCB-T is a good image but does not capture the pathology seen on your prior image. Again, we want to make sure that we have a concordance between the





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longitudinal and transverse planes. They're both of the far wall but there's not concordance as to the area of interest.

- The image labeled LICA is actually of the bifurcation. It's a good shot of the bifurcation, we might be able to use that for the bulb image. Unfortunately, there's not a good interface on the internal carotid. There may be a modest piece that we can try and use but it's not very clear and I don't have a lot of confidence in whatever measurement we would get.
- The image labeled LICA-T, the arrow is actually pointing to the far wall of the external carotid and we don't have interfaces that we can use. This is an invalid image.

I recommend re-scanning this patient just to make sure we capture whether or not she has pathology that we would characterize as plaque.

Hope that helps.

