

**SPEAKER:**

So moving on to a little workup. This is actually fairly simple. How do people work patients up for primary hyperpara. We've already sort of alluded to this. Thankfully, screening is super easy. You've already probably gotten the calcium. You just need to add on the PTH.

And some people like to use an ionized calcium. Other people like to use a total serum value. It doesn't really matter, as long as it's high either way.

It's also really important to draw these labs at the same time. And this is because we just talked about how calcium and PTH exists as a seesaw-- one's high, the other's low. And if you get one at one time point and the other value at another time point, you never know where on the seesaw that happens to be. So it's really important that those labs are drawn concurrently.

Now, these blue tests are other things that you can order if the results of the first two tests that you have-- the calcium and the PTH-- are borderline, so if the results are sort of equivocal. And those include 25 vitamin D levels, creatinine, 24 hour urine calcium levels, as we mentioned. Hypercalciuria, or increased spillage of calcium in the urine, can be a sign and supporting the diagnosis. One important thing to note is that not all of these tests are necessary. It's great to get them.

If I were to compare the level of workup that the endocrine surgeons will do versus the endocrinologists do, both are great. But endocrinologists will probably do more, and the surgeons will probably do a little less, because we tend to be more Occam's razor type of folks. We'll get the answer and just keep on moving.

Can you diagnose this disease based on imaging like you can for many other types of conditions? Endocrine conditions generally are biochemical diagnoses. You're going to get them based on symptom profile, history, physical, and then you confirm it with laboratory tests. Imaging tests don't help anyone other than potentially the people that are going to solve it surgically.

The other thing is that imaging tests are not infrequently wrong. They're negative, even though the diagnosis is clear. So one of the most common mistakes that we see some folks doing when they're referring their patients to us is saying, well, you know, the calcium and the PTH is high, but then we did this imaging study, and that was negative. So we don't think the patient has a diagnosis. We're just sending them to you just to make sure.

That's really not the right way to go. I mean, thank you for sending the patient. But you know, I think the diagnosis is still clear. The imaging study should really be the decision of the surgeon.