The Dorsal 4-finger Technique: A Novel Method to Examine Metacarpophalangeal Joints in Patients with Rheumatoid Arthritis

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www.youtube.com/watch?v=VMWtWejBNDo

Physical examination of the axial skeleton and peripheral joints are an integral part of what we do as rheumatologists. The clinical skills are important both in diagnosis and optimal outcome for our patients. Of all the patients that we see in rheumatology, the vast majority can be diagnosed based on history and physical alone, and I believe that's a wonderful aspect of our specialty.

New therapeutic strategies for the treatment arthritis depend on early treatment, aggressive treatment, and treating to a target. The most important element of the composite indices that we use in these therapeutic strategies is the swollen joint. In fact, the swollen joint is critical because it is the key predictor of radiographic progression over time; it is the key predictor of structural damage over time. So if we can easily detect a little bit of swelling in joints, then we will be able to diagnose it earlier. If we're able to more sensitively detect swollen joints, then we're going to be able to make the right decisions in treating to target over time. The key element and physical diagnosis in terms of these outcomes is the swollen joint.

So now we're going to turn to the metacarpophalangeal joints, and we're going to look for swelling in those joints. And there's the way the world does it, and the way that I teach, which is actually quite different. So most people, for feeling for swelling, they flex the finger. And so they flex the MCP and then what they do is they ballot on either side, that is on either side of the joint line, and the joint line is about here. And they ballot to see if they can actually feel the definition of the bones in that area, and if they don't feel the definition, they say that that's a swollen joint. The problem with that technique is that the swelling is not only above but it's also in the palm of the hand and, therefore, it is a large surface area to swell so you will not be able to detect it because you can't get your fingers around it because it's both above and below the joint that is on the palm or surface.

So what I do differently from this technique, which is the common technique, is with 2 fingers, the fourth and fifth fingers, I literally lift the joint, extend the joint up, and suddenly you can see even here, you can see swelling. So from here to there, there's suddenly swelling, and the swelling really relates to the fact you pushed the fluid to the top. And then all I need to do is take my fourth and fifth fingers, lift it up, and when I lift it up you suddenly see a bulge on the top. And then I take my 4 fingers and I'm literally, you can now see my fingers moving — it's like a balloon. All I'm doing is pushing my fingers in and out like I would a balloon — that's ballottement. And you can see now that my fingers are really moving back and forth or up and down, suggesting in fact that I'm capturing the fluid on the top of the joint.

What you've seen in the physical examination of the swollen joints is how to sensitively detect joint swelling. It is the key physical examination outcome that we use for diagnosis and for following the

patient over time in terms of our therapeutic response — it is the message. Swollen joints count actually count.