

Corneal Sensitivity Testing Video Transcript (US--2500097)

[00:00] (Calm music.)

[00:07] Hello. I'm Dr. Mah, a cornea specialist based in La Jolla, California.

[00:13] In this video, I'll show you how to perform corneal sensitivity testing, which is critical to a timely diagnosis of neurotrophic keratitis, or NK, because loss of corneal nerve function is the hallmark of this rare and underdiagnosed disease.

[00:31] If any form of epithelial damage was identified during a slit lamp exam or when staining the eye, the next step is to test for corneal sensitivity to confirm an NK diagnosis.

[00:45] Qualitative testing tools such as the sterile cotton-tipped applicator we will use today are practical options to measure sensitivity in less than a few minutes.

[00:57] First, make the cotton wisp by pinching the end of the applicator and gently pulling out a piece of cotton.

[01:13] Now, let's take a closer look at how to perform the test.

[01:17] First, it's important to test the center of the healthy eye to set a baseline.

[01:24] Then, move on to test the damaged eye.

[01:37] If epithelial damage can be identified, test the quadrant where the damage is located first before testing the center and remaining quadrants.

[01:48] Approaching the patient from the side, gently touch the cotton wisp to the damaged quadrant of the cornea.

[01:56] Look for a blink reaction and ask the patient to describe the feeling.

[02:01] Then, compare to the test results of the healthy eye.

[02:06] Repeat for the center and the remaining quadrants of the eye.

[02:13] Sensation can be recorded as "normal," "reduced," or "absent."

[02:19] If the patient shows little or no reaction, corneal sensitivity is reduced or absent, and they may have NK.

[02:32] NK can range from dry and cloudy corneal epithelium and the presence of punctate epithelial keratitis at Stage 1...

[02:42] ...to persistent epithelial defects at Stage 2...

[02:47]...and to corneal ulcer at Stage 3...

[02:51]...with risk of stromal melting and even corneal perforation.

[02:59] To recap, create the wisp and approach the patient from the side to test all four quadrants and the center of the eye.

[03:10] Record sensation as "normal", "reduced", or "absent" using the healthy eye as a reference.

[03:17] It can be that simple to help diagnose NK before it progresses.

[03:23] I encourage you to try this method and develop your own technique for corneal sensitivity testing.

[03:30] The earlier in disease progression that you can identify NK patients, the sooner you can move to a treatment regimen.

[03:38] Thanks for watching.