

**SOPHIE BAKRI:** Hello. I'm Sophie Bakri, and I'm a retinal specialist at the Mayo Clinic in Rochester, Minnesota. Today, I'd like to talk to you about a clinical research study that we performed at our department. The title of the study is Visual and Anatomic Outcomes of Anti-VEGF Therapy in Patients with Vitreomacular Traction and Age Related Macular Degeneration.

So as a background, it's well known that patients with macular degeneration have less prevalence of posterior vitreous detachment. It's also known that patients, with macular degeneration, have more of an adhesion of the posterior vitreous cortex to the macula. So therefore, it makes sense that vitreoretinal interface abnormalities may play an important role in exudative age related macular degeneration. It could be that the tractional forces, on the surface of the macula, may make it less likely for patients with exudated age related macular degeneration to respond to anti-VEGF therapy.

So we decided to test this hypothesis and we went back and reviewed all patients treated at Mayo Clinic with age related macular degeneration and anti-VEGF agents. However, all patients included must have had OCT and visual acuity documented at every visit, and must have had over one year of follow up. And patients were treated with, what we call, a modified pronto protocol, where they get injected when there is fluid on the OCT.

So what we found is that all patients, those with traction, of which there were 37, and those with no traction, of which there were 150, all responded to anti-VEGF therapy. So visual acuity outcomes were comparable in both groups and central macular thickness reduced in both groups with anti-VEGF therapy. However, what was interesting is that patients, with vitreoretinal interface abnormalities, needed more anti-VEGF injections per year than those who did not have any traction.

So to conclude the study, it became apparent that patients, regardless of whether they have vitreoretinal interface abnormalities, respond favorably to anti-VEGF therapies. But the question, for future research, then becomes, well, if we can remove the posterior vitreous cortex, such as with a treatment like vitrectomy, will it then help reduce the number of anti-VEGF injections that patients require. Now to answer this question it's going to require randomized control clinical trial, but it's certainly something interesting that we look forward to working on in the future.