SPEAKER: When differentiating the forms of Fabry disease, we typically use classical versus non-classical. Some people will refer to that as a type I or type 2.

So classical fabry disease is the earliest onset, and typically less than 1% of the expected enzyme activity. The onset of classical Fabry disease is generally going to be in childhood. And the presentation involves multiple organ systems in almost every case.

With non-classical Fabry disease, you will typically have between 5% and 20% of the predicted activity of the enzyme. And the onset of first symptoms will often be in adolescence or adulthood and correlates to some extent with how much residual activity the patient has.

In the mildest end of patients, so if they're approaching 20% of residual activity, the patients will often have only one symptom involved or one organ system involved. That will often be cardiac, thus some people will refer to that as the cardiac variants. The presentation with that may lack any other findings, so be limited only to cardiac symptoms. I don't like to refer to that as cardiac variant because if you do kidney biopsies, you will usually find storage in the podocytes of the kidneys, as well as evidence of storage in the cardiac muscle if you do cardiac biopsies.

But for that level of the enzyme activity, you are likely not to go into full blown renal failure, but will progress to clearly symptomatic and life-threatening heart disease. The onset of the heart disease can be any time from 20s into the 60s or 70s, depending on the amount of residual activity that one might have.

There is also a significant difference in non-classical disease between men and women in that the women may go through their whole lifetime without becoming symptomatic if they have non-classical Fabry disease, whereas most of the men with non-classical will eventually become symptomatic.