

There is a correlation between the concentration of lyso Gb3 levels in the circulation and the risk of developing kidney disease in a Fabry patient. Late-onset genetic variants that give rise to late-onset disease, non-classic disease, they characteristically have low lyso GB3 levels. So they are pathological levels, they are above normal, but they are low levels. What are we talking about levels? Levels around 5, 10, 15, 20. And they usually do not develop severe kidney disease.

So late-onset variants are usually associated with absence of kidney disease or with presence of proteinuria, development late in the natural course of the disease, after age 50, 60, and not associated with a decrease of glomerular filtration rate severe enough to need dialysis. The situation is completely different for classic genetic variants, classic Fabry disease. So these patients will have very high lyso Gb3 levels.

What does "very high" mean? Well, around 50, 60, 100, 200 nanomolar. And these patients with very high lyso Gb3 levels, these are the ones developing the classical course of Fabry nephropathy, pathological albinuria in childhood, overt proteinuria in young adults, and progressive loss of glomerular filtration rate until needing dialysis at around age 40.