

OK, so the natural history of Fabry nephropathy implies early pathological albuminuria, progression to overt proteinuria, progression to progressive loss of glomerular filtration rate needing dialysis after around 40 years. This is very similar to the natural history of diabetic kidney disease, which is-- it has the same stages but just over 20 years.

Does this mean that we are not seeing any Fabry patients without pathological proteinuria? Well, every patient is different. So this progressive cause from albuminuria over proteinuria and loss of renal function, you see this in most classic Fabry males, but, of course, there are exceptions.

There is this also characteristic feature that represents, maybe, normal, or even low, or only mildly elevated. So when you suspect Fabry nephropathy and do a diagnostic workup, I would say when you have a young Fabry male, you may also think about Fabry females, but it is much more uncommon.

So just to provide an image of the standard Fabry patient, let's say it's a young male who has proteinuric kidney disease, who does not have nephrotic syndrome but may have nephrotic range proteinuria. Microhematuria is typically absent unless he has an additional condition. So having Fabry nephropathy does not protect you from having any other neuropathy, but characteristically, there is no pathological hematuria.

So under these conditions, pathological proteinuria or albuminuria in a young male, you should suspect Fabry nephropathy. And there is a very easy non-invasive test, which is assessment of alpha-galactosidase A activity. And this is usually done in a dried blood spot. So it's very easy. You just need a few drops of blood from the patient. You may get them from the finger. And you assess the activity of the enzyme that is missing in Fabry disease, which is alpha-galactosidase A.

From my point of view, this would be a standard workup of any proteinuric patient. Any proteinuric kidney disease you should assess for the presence of diabetes, for the presence of auto-antibodies against kidney antigens, and for alpha-galactosidase A activity. Very cheap test, and if it's low, then you have additional workup. But if alpha-galactosidase activity is normal, you can confidently exclude Fabry disease in males. Not so much in females, but in males, you can exclude.