Does immunoglobulin A nephropathy affect long-term graft outcome after kidney transplantation?

Immunoglobulin A (IgA) nephropathy is the most common form of glomerulonephritis worldwide and is a frequent cause of end-stage renal disease in Asian and Caucasian populations.[1] Although transplantation represents the optimal form of renal replacement therapy, recurrence of IgA nephropathy has been detected in up to 60% of the graft recipients within 10 years posttransplant and ultimately may result in graft loss. [2] Given the increasing imbalance between organ demand and availability, a better characterization of all factors that may impact long-term graft outcome is mandatory. This may be of particular relevance for developing countries, where resources to support organ transplant programs are scanty.

In this issue of the journal Chacko et al[3] attempted to determine the long-term graft outcome in Indian renal transplant recipients whose native kidney disease was IgA nephropathy. The study showed that five-year graft survival for IgA patients was not significantly different from that observed in a reference group including patients without IgA nephropathy, suggesting that this disease does not represent a contraindication for kidney transplantation despite a high recurrence of the disease. Of note, the five-year renal allograft survival was eventually better in patients with primary IgA nephropathy (90%) compared to other primary diseases (79%), whereas this trend was reversed at 10 years posttransplant (49% vs. 73%). These results seem to support the recently proposed hypothesis that in patients with this disease, the development of alloreactive anti-HLA IgA antibodies may block the deleterious effect of IgG and IgM antibodies on the graft in the short term, whereas other factors contributing to graft loss, including recurrent disease, may become more relevant on long-term follow-up.[2]

Patients with recurrent IgA nephropathy had a significantly greater degree of proteinuria and trend to graft loss compared to the nonrecurrent group.[3] To this, the blockade of the renin-angiotensin system—which is generally accepted being renoprotective in proteinuric nephropathies[4]—may be of relevance in transplant recipients with chronic graft dysfunction due to recurrent IgA nephropathy, as recently documented by retrospective observations.[5] In the present work the authors did not mention the use of angiotensin converting enzyme inhibitors and/or angiotensin II receptor blockers. It would be interesting for future investigations, to prospectively study whether the use of these agents might impact long-term graft outcome in patients experiencing or not experience recurrence of the disease.

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References