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# Immunoglobulin M Nephropathy
## Not Uncommon But Still a Controversial Entity

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Analogous to the prominent or co-dominant deposits of Immunoglobulin (Ig) A in the mesangial region encountered in IgA nephropathy (IgAN),[1,2] investigators have also described a morphologic lesion, characterized by sole or dominant diffuse and generalized distribution of granular IgM deposits within the mesangium, and termed it *IgM nephropathy* (IgMN).[3-7] However, despite the

recent rise in the number of publications on this disease and a renewed interest in this area, IgMN is still a neglected entity.[3,8]

Morphologically, the disease exhibits variable morphologic features from normal glomeruli to mesangial hypercellularity or focal and segmental glomerulosclerosis (FSGS), as is seen in lupus nephritis or IgAN.[5-11] Thus, IgMN is defined solely on immunohistological features in a similar manner to IgAN. However, there is a potential caveat here. Careful attention should be made to exclude other conditions which may show scant deposits of IgM, as in some cases of minimal change disease or FSGS. It seems that the later phenomenon is partly responsible for IgMN being still largely a controversial clinicoimmunopathologic entity.[5-11] Indeed, this nephropathy differs from minimal change disease or FSGS by a higher prevalence of steroid resistance and dependence in its proteinuric group. Thus, the pathologic findings need to be correlated with clinical and serological studies to rule out the secondary causes of IgM deposition.[7,8,11]

Previous investigators have found that IgMN affects all ages and both sexes.[5-8] The incidence has been found to be around 4.8% to 7.8% with different gender predilection, while some studies show male predilection, others observed the female gender predilection.[5-8,11] In general, clinical manifestations of IgMN are highly variable and the nephropathy occurs predominantly in children and young adults, but it can occur at any age.[5,8,12-14]

In the study undertaken by Mubarak and colleagues,[15] currently published in the *Iranian Journal of Kidney Diseases*, 41 cases of IgMN with a mean age of 30.21 ± 10.12 years were investigated. The authors attempted to determine the frequency and the demographic, clinical, and immunopathologic characteristics of this disease in adults undergoing renal biopsies for medical kidney diseases in their center.[15] In their cohort study, the most common morphologic change was glomerular mesangial cell proliferation, found in 68.3% of biopsies, followed by mesangial matrix expansion in 39% of cases. Also minor glomerular alterations were noted in 12.2% cases and FSGS lesion in 9.8%.[15] Although they concluded that IgMN is a less common cause of kidney diseases in adults in their country, the authors rightly proposed undertaking further longitudinal investigations to clarify the status of IgMN among the primary glomerulopathies, especially in the developing countries, where the disease is thought to be common and in the developed countries, too.

## CONFLICT OF INTEREST

None declared.

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Commentary

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# Does Kidney Retransplantation Have a Favorable Outcome?

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Although kidney retransplantation is often accepted the best choice for most patients subsequent to kidney allograft loss, there is surprisingly few data to support it.[1] While outcomes after kidney transplantation have enhanced over the years, graft failure eventually occurs in many patients. Retransplantation often provides the desirable outcomes in these patients,[2] especially compared to those who are on maintenance dialysis.[1]

In the current issue of the *Iranian Journal of Kidney Diseases,* Nourbala and colleagues[3] noted that graft survival is not significantly different for the first kidney transplantation versus repeat kidney transplantation. We have previously reported a favorable graft and patient survival rates in 108 retransplant patients.[2] Between 2000 and 2005, a total of 35 340 living donor kidney transplants were performed in the United States, of which 7.1% were retransplant and from 48 351 deceased donor kidney transplants were 9.7% retransplants.[4] Interestingly, outcomes of living donor retransplants were much better than primary deceased donor transplants.[4] It is of interest that the patient reported by Nourbala and colleagues[3] received a kidney from a living donor as the 4th retransplantation with a good graft function.

If the patient continue chronic immunosuppressive agents at the time of evaluating for retransplantation, some adjustment should be made in drug dosage, especially in potential preemptive retransplantation or in the patient on dialysis with significant residual kidney function in the primary allograft. However, significant reduction dosage of immunosuppressive agents should be avoided for preventing acute rejection in these patients. Immunosuppressant adjustment should take into account other maintenance immunosuppressive agents being used concurrently and the planned protocol for induction and maintenance after retransplantation.[1] In retransplantation as well as primary kidney transplantation, potent immunosuppressive regimens are used to prevent acute graft loss, but risk of infection and malignancies should be kept in mind, and thus, adjusted dose is recommended to balance these. Immunosuppressive induction with potent agents should be used in retransplantation as well as primary transplantation. In the current case reported by Nourbala and colleagues,[3] rabbit antihuman thymocyte globulin, tacrolimus, mycophenolate mofetile, and prednisolone were administrated. Retransplant patients have a higher risk for acute rejection and taking high-dose immunosuppressive agents, and so they receive more potent agents in comparison with those with a first graft. There is no information about general cumulative risk of malignancies or life-threatening infections after several courses of potent immunosuppressive induction after retransplantation. This can be very important, especially in cases of administering polyclonal antibodies for treatment of acute rejection, in patients that receive similar agents for induction of primary and repeated grafts, and in cases with short interval between the first and subsequent grafts.[1]