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KIDNEY TRANSPLANTATION IN MONOCLONAL IMMUNOGLOBULIN DEPOSITION DISEASE: A REPORT OF 6 CASES

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BACKGROUND AND AIMS: Monoclonal immunoglobulin deposition disease (MIDD) is a systemic rare condition that usually leads to end stage renal disease. Treatment of patients with a bortezomib-based regimen followed by autologous stem cell transplantation (ASCT) has been increasingly used, with improvements in the response rates and the renal graft outcomes in kidney transplant recipients

METHOD: Retrospective study of 6 patients diagnosed of MIDD with complete response but not renal response after hematologic treatment that underwent kidney transplant in our institution between 2010 and 2019.

RESULTS: A total of 6 patients (5 women) were analyzed, with mean age at diagnosis of 47 years (range 40-53). At presentation their mean eGFR was 18 mL/minute (range 9-25) and mean proteinuria of 5.5 g (range 0.290-12.5). The deposit was kappa type except in 1 case (heavy and light lambda type chains). In all of them there was an absence of monoclonal component in blood and urine but positive immunofixation in 5 cases (2 only in urine). 3 started chronic hemodialysis during admission and the others at 3, 5 and 44 months after diagnosis. As hematological treatment, all received bortezomib followed by ASCT, being under complete hematological response at the time of kidney transplant. It was performed at 28 months on average from ASCT (range 11-42), with mean kappa/lambda ratio of 2.6 (range 1.33-3.75). 3 patients received induction with thymoglobulin and 3 with basiliximab, followed by triple therapy with tacrolimus + prednisone + mTOR inhibitor (4 patients) or mycophenolate (2 patients). During a median follow-up of 20,5 months from kidney transplant and 54 months from ASCT, 1 patient experienced hematologic relapse and 2 had hematologic progression (one of them with MIDD relapse in the allograft) requiring treatment. The patient with organ relapse received Daratumumab monotherapy achieving complete hematologic response but graft failure. The other 5 patients had functional graft with median serum creatinine 1.68 mg/dL.

CONCLUSION: In patients with MIDD and sustained complete hematologic response, a kidney transplant can be considered. The optimal approach to treatment of hematologic relapse or recurrence of MIDD after kidney transplant remains to be determined

