

Mycophenolate mofetil for treatment of idiopathic nephrotic syndrome – a single center experience (preliminary study)

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ABSTRACT

Introduction: Mycophenolate mofetil (MMF) is used in treatment of idiopathic nephrotic syndrome in children (INS).

Purpose: To evaluate clinical results of MMF treatment in steroid-dependent (SD) and steroid-resistant (SR) nephrotic syndrome.

Materials and methods: A retrospective analysis of 26 patients (19 boys, 7 girls) with SDINS and SRINS treated with MMF during the years 2003–2013 was made. The remission length of INS and number of relapses per year before the introduction of MMF and after 12 months was calculated. An analysis of the side effects was made.

Results: The median age of INS diagnosis was 26.5 months (IQRs 24-36 months). Nineteen of the patients (73%) suffered from SDINS whereas the remaining 7 (27%) had SRINS. Twenty three (88.5%) patients underwent renal biopsy: minimal change disease (MCD) in 69.6% (n=16), focal segmental glomerulosclerosis (FSGS) in 17.4% (n=4), membranoproliferative glomerulonephritis (MPGN) in 8.7% (n=2) and mesangial cell proliferation in one case. The median MMF dosage was 956.0 mg/m²/24h (IQRs 768.1-1059.7

mg/m²/24h). Eleven patients (42.3%) were taking MMF together with cyclosporine A (CsA). In patients suffering from SDINS, there was a trend to lower the recurrence rate during MMF treatment [2.0/year (IQRs 0.25-2.0 per year) vs 2.0/year (IQRs 1.0-2.75 per year), p=0.09]. Remission without proteinuria was significantly longer in patients treated with MMF; remission median was 8.5 month (IQRs 6.25-11.0 month) vs 4.5 month (IQRs 4.0-7.5 month), (p=0.014), similarly the average length of remission without corticosteroids was 6.0 months (IQRs 0.25-8.5 months) vs 3.0 months (IQRs 0.0-7.25) months (p=0.028). In children SRINS, 4/7 children MMF treatment was clinically ineffective. Side effects of the treatment were: leucopenia (n =10), hyperbilirubinemia (n = 3), gastrointestinal disorders (n = 1) and anemia (n = 1).

Conclusion: This study confirmed the efficacy of the treatment with MMF in SDINR in comparison with previously used drugs, with a small number of side effects.

Key words: Idiopathic nephrotic syndrome, mycophenolate mofetil, child, recurrence
