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Mycophenolate mofetil use in refractory juvenile systemic lupus erythematosus

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Introduction

The optimal immunosuppressive treatment in patients with systemic lupus erythematosus (SLE) remains controversial [1]. Mycophenolate mofetil (MMF) has proved to be an efficacious and safe therapy in adult lupus nephritis [2]. Recently, this drug has been suggested as a possible new alternative treatment for juvenile-SLE, especially in cases of lupus nephritis refractory to treatment with corticosteroids, cyclophosphamide azathioprine, methotrexate and/or cyclosporine [3-4]. In this review we describe our experience with six children diagnosed with SLE and treated with MMF.

Aim

To report the clinical experience of a single center in the use of MMF in refractory juvenile SLE.

Patients and methods

Chart review of refractory juvenile SLE treated with MMF in the pediatric rheumatology outpatient clinic of Santa Maria Hospital.

Results

Six children with juvenile SLE (five girls and one boy) with a mean age of 13.8 years (range 10-16) were treated with MMF at a dose of 0.5 to 2.5g/dl daily for a period of 6 to 29 months (mean 17.5±11.6). Patients were followed for 5.2±2.2 years. The average disease duration was of 3.5 ±2.1 years at the beginning of the MMF treatment. All patients had kidney involvement; three of them had concomitant severe central nervous system involvement and two antiphospholipid syndrome. Five patients were biopsy-proven severe lupus nephritis (three with class IV and two with class V). One patient had thrombotic thrombocytopenic purpura associated to SLE. All patients were previously treated with high dose steroids, four of them started ciclophosphamide (CYC) pulses and one received rituximab (RTX).Five patients began MMF as induction therapy in renal involvement and only one as maintenance therapy. MMF was effective in reducing disease activity and as a steroid-sparing agent in half of the patients. The responders experienced a marked reduction in SLEDAI score, in anti-dsDNA antibody titers and an improvement in serum complements levels. One patient stopped MMF therapy due to gastrointestinal intolerance and another one reduced the dose due to leucopenia.

Conclusion

MMF appeared to be effective and safe in controlling disease activity in some refractory juvenile SLE. It also showed a significant steroid sparing effect.

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