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Treatment of steroid resistant nephrotic syndrome in children.

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Source

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Abstract

Achieving remission in children with steroid-resistant nephrotic syndrome (SRNS) could be difficult. Many immunosuppressive drugs are used with variable success rates. We have studied the response of children with SRNS who presented to our pediatric's renal unit between 2002 and 2007 to various modalities of therapy. We included patients with no response to prednisolone (60 mg/M2/day) after four weeks of therapy; all the patients had renal biopsy and followup duration for at least one year. We excluded patients with congenital nephrotic syndrome, lupus, or sickle cell disease. There were 31 (23 girls and 8 boys with F:M = 2.9:1; the mean age at presentation was 4.2 +/- 3.2) children who fulfilled the inclusion criteria. The mean duration of follow up was 3.1 +/- 1.6 years. Twenty children (65%) achieved partial (6 children) or complete (14 children) remission. There were 16 children treated with cyclophosphamide either oral or intravenous, and only 4 of them (25%) achieved remission. Seven children received oral chlorambucil, and only2 of them (28.5%) achieved remission; none of the children experienced side effects. Fifteen children received cyclosporine, and only eight of them (53%) achieved remission. Six children developed gum hypertrophy and one had renal impairment, which was reversible after discontinuing the drug. Mycophonelate mofetil (MMF) was used as the last option in 5 children, and 2 of them achieved complete remission. One child developed a systemic cytomegalovirus (CMV) infection which indicated discontinuing the drug. Fourteen (45%) children needed more than one immunosuppressive therapy. Three children progressed to end stage renal failure and required dialysis. We conclude that SRNS in children is a difficult disease with significant morbidity. However, remission is achievable with cyclosporine and other immunosuppressive agents. Treatment should be individualized according to the underlying histopathology, and clinical and social conditions of the children