Topic	**治療兒童腎病症候群只有類固醇嗎?** **Treatment the childhood idiopathic nephrotic syndrome: are steroids the answer?**
Authors	林清淵 醫師 中國醫藥大學附設兒童醫院 兒童腎臟科

The use of steroids in idiopathic nephrotic syndrome is the major discovery of the twentieth century in the field of pediatric nephrology. At onset of the twenty-first century, steroids remain the first line of treatment at first flare. All the protocols to treat the first flare are similar by a common sequence including a first phase of daily prednisolone/prednisone at a dose of 60 mg/m2/day for at least 4 weeks followed by an alternate-day regimen for several weeks. It appears that a cumulated dose of 2240 mg/m2 given in 8 weeks at the first flare without tapering sequence is not inferior to increased dose and duration in terms of prevalence of frequent relapsers and the subsequent cumulated dose of steroids at 24 months of follow-up. A higher cumulated dose might only be interesting in patients aged below 4 years although a formal demonstration is still missing. Several retrospective studies are concordant to suggest that intravenous methylprednisolone pulses are useful to reach a full urinary remission in case of oral resistance to 4 weeks of oral prednisone/prednisolone. A majority of patients have multiple relapses after the treatment of the first flare and half meet the definition of steroid dependency. In those patients, long-lasting alternate-day prednisone/prednisolone therapy does not lead to long-lasting remission, opening the question of the best strategy of immunosuppression.
Several recommendations can be suggested to optimize the use of steroids:

1. Either daily prednisolone or prednisone at 60 mg/m2 remains the first-line treatment for the first flare of idiopathic nephrotic syndrome.
2. In terms of full urinary remission, 4 weeks of daily prednisone are enough at the first flare and no more benefit can be expected of a longer period of daily prednisone.
3. A cumulated dose of 2240 mg/m2 given in 8 weeks at the first flare without tapering sequence is not inferior to increased dose and duration in terms of prevalence of frequent relapsers.
4. Intravenous methylprednisolone pulses are useful to reach a full urinary remission in case of oral resistance to 4 weeks of oral prednisone and seem to improve the delay of remission after the initiation of cyclosporine in true steroid-resistant patients.
5. Long-lasting alternate-day prednisone therapy is still an acceptable treatment during a few years in the minority of relapsing patients that are fully controlled with low doses. The total cumulated dose and the length of this treatment without major risk of developing secondary complications at adult age remain to be defined.