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## Strategies to minimize growth retardation in children with Steroid-sensitive nephrotic syndrome

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Minimal Change Disease (MCD) is the most common cause of nephrotic syndrome (NS) in children. Although most cases are steroid-sensitive, the high rate of relapse demands a larger cumulative dose, leading to growth retardation in some. The impact of steroid therapy is more significant during the first 3 months, with some children failing to achieve catch-up growth even after 6 months. Since repeated doses of steroids add significant toxicity over time, several approaches have been suggested to minimize this adverse effect, all with various rates of success. Some of these approaches include: prolongation of the initial duration of treatment, addition of calcineurin inhibitors (CNIs), or various protocols for weaning steroids once response is achieved. CNIs are not a good first solution. They require costly drug monitoring, while only bringing marginal benefits to the rate of relapse. To decrease the cumulative dose of steroids, we attempted first to predict the relapse pattern from the initial presentation. In our study, the absence of hematuria along with a rapid response to steroids (less than 7 days), predicted an infrequent relapsing course. This pattern was opposite to the phenotype of MDR-1 gene mutants. Since 2003, at our center, children with MCD who showed both a faster response time and an absence of hematuria are treated with a shorter course of steroids, as per ISKDC protocol. This approach led to improved growth velocity rate and height SDS, thus minimizing the adverse effects of steroids on growth in these children.

### Biography

Alex Constantinescu obtained his MD degree from the "Victor Babes" University of Medicine and Pharmacy in Timisoara, Romania and completed pediatric nephrology specialty training at Montefiore Medical Center, Albert Einstein College of Medicine in New York. Subsequently, he joined the faculty at Robert Wood Johnson Medical School in New Brunswick, NJ. He relocated with his family to Florida in 2003. Currently he maintains Board Certification in Pediatric Nephrology, is the Medical Director of Pediatric Nephrology, Dialysis and Hypertension at Joe DiMaggio Children's Hospital, Hollywood, FL, and is part of the voluntary faculty at University of Miami and Florida Atlantic University.

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