

Steroid withdrawal in pediatric kidney transplant allows better growth, lipids and body composition: A randomized controlled trial

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Background: Glucocorticoid immunosuppressant therapy in pediatric kidney transplant (Tx)

recipients does not allow the improvement of growth after Tx. **Objective:** To determine the effect of early steroid withdrawal (SW) on longitudinal growth, insulin sensitivity (IS), and body composition (BC). **Methods:** This was a prospective, randomized, multicenter study in Tx. Insulin-like growth factor (IGF)-I, IGF-binding protein 3 (IGFBP3), IS, and BC (DEXA/pQCT) were determined at baseline and up to 12 months after Tx. **Results:** A total of 30 patients were examined; 14 patients were assigned to the SW group (7 male, 7 female; 12 in Tanner stage I) and 16 patients were assigned to the steroid control (SC) group (10 male, 6 female; 12 in Tanner stage I). Their chronological age was 7.8 ± 4.3 years, height was -2.3 ± 0.99 SD scores (SDS), and body mass index -0.3 ± 1.2 SDS. After 1 year, the SW group showed an increase in height SDS ($+1.2 \pm 0.22$ vs. $+0.60 \pm 0.13$ SDS in the SC group, $p < 0.02$), lower