

ABSTRACS

**SYSTEMATIC REVIEW CORRELATION BETWEEN CORTICOSTEROID THERAPY AND HEIGHT IN CHILDHOOD NEPHROTIC SYNDROME**

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**Background:** *Treatment of nephrotic syndrome using corticosteroid especially prednisone, which belongs to a class of glucocorticoid. Glucocorticoids are proven to be able to inhibit the growth through several mechanisms.*

**Objective:** *Analyze the correlation between corticosteroid therapy and height in childhood nephrotic syndrome.*

**Methods:** *This is a systematic review. The databases used are PubMed, Science Direct, and Research Gate with the keywords "(corticosteroid OR prednisone OR prednisolone) AND (height) AND (nephrotic syndrome) AND (children)". Quality assessment was done by quality assessment tool for quantitative studies from EPHPP and by looking at the literature publisher's ranking in the Scimago Journal Rank.*

**Results:** *From 1170 literatures, 21 full text papers were screened and three paper that met the inclusion criteria for final analysis. Assessment of journal quality obtained two literatures with strong results and one literature with moderate results. The results of z-scores on children's initial height from the three literatures were  $-0.76 \pm 1.96$ ;  $0 \pm 0.63$ ; and  $-0.3 \pm 1.28$ . The results of z-scores for the child's final height were  $-0.89 \pm 2.05$ ;  $-0.1 \pm 0.45$ ; and  $-0.5 \pm 1.07$ . Two literatures suggest there is a correlation between corticosteroid therapy and height on childhood nephrotic syndrome and one literature didn't find the correlation between them.*

**Conclusion:** *The mean final height z-scores are  $-0.66 \pm 3.04$  and height of SDNS ( $-0.33 \pm 0.87$ ) and SRNS ( $-0.97 \pm 1.34$ ) patients are lower than SSNS ( $-0.27 \pm 0.97$ ) patients. There is a correlation between corticosteroid therapy and height on childhood nephrotic syndrome.*

**Keywords:** *corticosteroid, height, nephrotic syndrome*