

신증후군 환자에서 갑상샘기능저하증의 진단과 치료적 지표로서 갑상샘자극호르몬(TSH)의 역할

조선대학교 의과대학 내과학교실

강대웅 · 이완수 · 백종훈 · 나지선 · 박하열 · 신병철 · 김현리 · 정종훈

Role of TSH as Diagnostic and Therapeutic Index of Hypothyroidism in Nephrotic Syndrome Patients

Dae Woong Kang, Wan Soo Lee, Jong Hun Baek, Ji Sun Na, Ha Yeol Park
Byung Chul Shin, Hyun Lee Kim, Jong Hoon Chung

Department of Internal Medicine, Chosun University Hospital

Background: In patients with a nephrotic syndrome, urinary losses of thyroid hormone and thyroid-binding protein are known to be associated with developing of hypothyroidism. However, a limited number of studies have reported accurate prevalence and relating factors of overt or subclinical hypothyroidism in nephrotic syndrome patients.

Methods: In this study, retrospectively, we evaluated 79 patients were diagnosed nephrotic syndrome in Chosun University Hospital with thyroid function test.

Result: There were 43 males and 36 females of 79 patients. Mean age was 49.9 years old. Serum creatinine concentration was 1.57 mg/dL and mean TSH level was 4.037 μ IU/mL. The prevalence of subclinical hypothyroidism was 16.5% (13/79), overt hypothyroidism was 13.9% (11/79) and euthyroidism was 69.6% (55/79). Serum albumin was significantly lower in the hypothyroidism patients compared with euthyroidism patients ($p < 0.05$). 24hr proteinuria amount was lower in hypothyroidism patients than euthyroidism patients but no statistical significance ($p > 0.05$). TSH was negatively correlated with serum albumin ($r = -0.430$, $p < 0.002$) and positively correlated with 24hr urine protein amount ($r = 0.396$, $p < 0.01$) and 24hr albumin amount ($r = 0.340$, $p < 0.01$). We observed that TSH level was significantly normalized after 24hr proteinuria amount was controlled to normal range ($p < 0.05$).

Conclusion: Our study shows that the incidence of overt hypothyroidism was highly 13.9% and TSH level is a useful index in diagnosis and treatment of hypothyroidism in nephrotic syndrome patients.

Key Words: 갑상샘기능저하증, 신증후군, 갑상샘자극호르몬
Hypothyroidism, Nephrotic syndrome, TSH