

## 갑상선호르몬 치료로 호전을 보인 갑상선기능저하증에 동반된 신부전

대구파티마병원 내과

장예수 · 김동현 · 서혜진 · 김성호 · 이덕현

### Improved Renal Function after Treatment of Hypothyroidism

Ye-soo Jang, Dong-hyun Kim, Hye-jin Seo, Sung-ho Kim and Duk-hyun Lee

Daegu Fatima Hospital, Department of Internal Medicine

**Introduction :** Impairment of renal function is one of the important and mostly overlooked manifestations of hypothyroidism. Although morphological features have been described in hypothyroid kidneys, contributing to acute renal impairment and a decrease in GFR, these changes are reported to be largely reversible. We experienced eight hypothyroid patients who showed some improvement in renal function after thyroid hormone replacement.

**Cases :** The patients visited nephrology clinic with mild edema. Initial serum creatinine levels ranged between 1.03 and 1.73 mg/dL, with creatinine clearances (CCr) by MDRD equation ranging between 31.9 and 77.4 mL/min. After 6- 24 weeks of thyroid hormone replacement therapy, serum creatinine levels decreased to the range of  $0.67 \pm 1.36$  mg/dL and CCr increased to the range of  $55.6 \pm 99$  mL/min.

Patient	Sex	Age	Baseline							Post treatment		
			FreeT4 (ng/dL)	TSH (uIU/mL)	T-chol (mg/dL)	Na (mEq/L)	BUN (mg/dL)	Cr (mg/dL)	CCr (mL/min)	Cr (mg/dL)	CCr (mL/min)	CCr (mL/min)
1	M	46	0.28	88	366	142	19.4	1.26	65.4	1.04	81.7	16.3
2	F	67	0.03	187	307	144	22	1.7	31.9	1.05	55.6	23.7
3	M	67	0.1	80	315	146	13.4	1.73	42.1	1.36	55.6	13.5
4	F	64	0.04	91.9	503	142	18.3	1.14	51	0.71	88.1	37.1
5	M	40	0.1	80	315	143	18.3	1.65	49.4	1.13	76.4	27
6	M	46	0.08	100	215	137.4	10.9	1.09	77.4	0.9	96.6	19.2
7	F	50	0.1	80	266	139.6	21.7	1.03	60.3	0.67	99	38.7
8	F	34	0.03	194	366	138	20.1	1.4	45.8	0.87	79.2	33.4

**Conclusion :** Hypothyroidism is associated with a subtle deterioration in renal function and usually detected as slightly increased serum creatinine levels reversible with thyroid hormone replacement therapy. As hypothyroidism is second only to diabetes as most common endocrine disorder, TSH should be evaluated in patients with unexplained mild azotemia or CRF patients presenting with recent accelerated aggravation of renal function.

**Key Words :** 신부전, 갑상선기능저하증  
Renal failure, Hypothyroidism