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KORELASI KADAR T4 DAN TSH DENGAN PROFIL LIPID PADA PASIEN HIPERTIROID DI RSUD ZAINAL ABIDIN PAGARALAM WAY KANAN

xvi + 35 halaman, 9 tabel, 5 gambar, 13 lampiran

ABSTRAK

Hipertiroidisme merupakan kondisi dimana kelenjar tiroid terlalu aktif dan meningkatkan metabolisme tubuh, termasuk metabolisme lipid seperti kolesterol, trigliserida, HDL, dan LDL. Peningkatan kadar T4 dan penurunan TSH memengaruhi kadar lipid dalam darah melalui perubahan fungsi fisiologis yang mengatur pemecahan, penyimpanan, dan distribusi lemak. Aktivitas tiroid berlebihan dapat mengganggu keseimbangan metabolisme lipid dan memicu perubahan komponen lipid dalam darah yang bervariasi antar individu. Penelitian ini bertujuan mengetahui korelasi kadar T4 dan TSH dengan profil lipid pada pasien hipertiroid di RSUD Zainal Abidin Pagaralam Way Kanan. Penelitian ini menggunakan desain analitik *cross sectional*, melibatkan 34 pasien hipertiroid yang memenuhi kriteria inklusi, dengan teknik *accidental sampling*. Data kadar T4 dan TSH diperoleh dari rekam medis pasien, sementara data profil lipid dari hasil laboratorium yang mencakup kolesterol total, trigliserida, HDL, dan LDL. Hasil penelitian menunjukkan rerata kadar T4 sebesar 302 ± 76 nmol/L dan TSH sebesar $0,05 \pm 0,06$ uIU/L, dengan rerata profil lipid masih berada dalam rentang normal. Uji hipotesis menunjukkan adanya hubungan yang signifikan antara kadar T4 dan TSH dengan profil lipid ($p \leq 0,005$). Hal ini menunjukkan bahwa kadar hormon tiroid sangat berpengaruh terhadap metabolisme lemak dalam tubuh.

Kata Kunci: Hipertiroid, Korelasi, Profil Lipid, TSH, T4
Daftar Bacaan: 30 (2010–2025)

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**CORRELATION BETWEEN T4 AND TSH LEVELS WITH LIPID
PROFILE IN HYPERTHYROID PATIENTS AT ZAINAL ABIDIN
PAGARALAM REGIONAL HOSPITAL, WAY KANAN**

xvi + 35 pages, 9 tables, 5 images, 13 appendices

ABSTRACT

Hyperthyroidism is a condition in which the thyroid gland becomes overactive and increases the body's metabolism, including lipid metabolism such as cholesterol, triglycerides, HDL, and LDL. Increased levels of T4 and decreased TSH affect blood lipid levels through changes in physiological functions that regulate the breakdown, storage, and distribution of fat. Excessive thyroid activity can disrupt the balance of lipid metabolism and trigger variations in blood lipid components between individuals. This study aims to determine the correlation between T4 and TSH levels and lipid profiles in hyperthyroid patients at RSUD Zainal Abidin Pagaralam Way Kanan. This research used an analytical design with a cross-sectional approach, involving 34 hyperthyroid patients who met the inclusion criteria, selected using accidental sampling. T4 and TSH data were obtained from patients' medical records, while lipid profile data were taken from laboratory test results, including total cholesterol, triglycerides, HDL, and LDL. The results showed an average T4 level of 302 ± 76 nmol/L and TSH of 0.05 ± 0.06 uIU/L, with average lipid profiles still within the normal range. Hypothesis testing showed a significant relationship between T4 and TSH levels and lipid profiles ($p \leq 0.005$). This indicates that thyroid hormone levels greatly influence fat metabolism in the body.

Keywords: Hyperthyroidism, Correlation, Profil Lipid, TSH, T4

Reading List: 30 (2010–2025)