

PERAN THYROID STIMULATING HORMONE (TSH) SEBAGAI FAKTOR PROGNOSIS KARSINOMA TIROID

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INTISARI

Karsinoma tiroid adalah keganasan kepala leher yang sering terjadi. TSH bersifat sebagai stimulus pertumbuhan kanker dan diketahui berpengaruh pada progresivitas kanker tiroid. Kadar TSH dapat membantu dalam penentuan stadium dan menentukan prognosis pasien karsinoma tiroid. Penelitian ini bertujuan untuk mengetahui peran TSH sebagai faktor prognosis karsinoma tiroid.

Penelitian ini adalah *case control study* (studi kasus-kontrol). Kelompok kasus adalah karsinoma tiroid stadium lanjut (III&IV) dan stadium awal (I&II) sebagai kelompok kontrol. Sampel penelitian adalah penderita karsinoma tiroid yang menjalani operasi tiroidektomi di RSUP. Dr. Sardjito Yogyakarta tahun 2015-2017. Kadar TSH diambil dari pemeriksaan darah sebelum dilakukan operasi tiroidektomi. Penentuan stadium berdasarkan AJCC 2012. Perbedaan kadar TSH dianalisis pada masing-masing kelompok dan antar kelompok penelitian. Sampel penelitian berjumlah 66 pasien yang menjalani tiroidektomi, masing-masing kelompok terdiri dari 33 pasien. Terdapat perbedaan yang bermakna kadar TSH antara karsinoma tiroid stadium awal dan lanjut dengan nilai $p = 0,001$ dan *Rasio Odds* (RO) 9.9 (IK 95% 3.19-30.15) (kadar TSH <1.27 mIU/L dibandingkan ≥ 1.27 mIU/L). Hasil analisis regresi logistik didapatkan hasil $p = 0,009$ pada variabel kadar TSH.

Kesimpulan penelitian ini adalah TSH berperan sebagai faktor prognosis karsinoma tiroid. Berdasarkan *cut off point* 1.27 mIU/L, pasien karsinoma tiroid dengan kadar TSH tinggi memiliki risiko yang lebih besar memiliki stadium lanjut dibanding pasien dengan kadar TSH rendah

Kata kunci : *thyroid stimulating hormone* (TSH), karsinoma tiroid, stadium awal, stadium lanjut, tiroidektomi.

THE ROLE OF THYROID STIMULATING HORMONE (TSH) AS PROGNOSIS FACTORS OF TIROID CARCINOMA

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ABSTRACT

Thyroid carcinoma is a common neck head malignancy. TSH is a stimulus for cancer growth and is known to have an effect on the progression of thyroid cancer. TSH can help in staging and determining prognosis patients with thyroid carcinoma. This study aims to determine the role of TSH as a prognosis factor of thyroid carcinoma.

This case-control study recruited subjects who underwent thyroidectomies for his/her thyroid enlargement at Dr Sardjito general hospital, Yogyakarta, between 2015-2017. Case group were late stage (III & IV) and early stage (I & II) thyroid carcinomas as a control group. Determination of stadium are using AJCC 2012. TSH levels had been taken before the thyroidectomies. The TSH levels and staging will be analyzed among and between groups. Study sample were 66 patients post thyroidectomy, each group consisted of 33 patients. There was statistically significant difference TSH level between early stage thyroid carcinoma and late stage thyroid carcinoma with $p = 0,001$ and Odds Ratio (OR) 9.9 (CI 95% 3.19-30.15) (TSH level $<1.27\text{mIU/L}$ compared to $\geq 1.27\text{mIU/L}$). The result of logistic regression analysis is $p = 0,009$ for TSH variable.

Based on explanation above, we conclude that TSH acts as a prognostic factor of thyroid carcinoma. Based on cut off point 1.27 mIU / L , patients with high TSH have a greater risk of having an advanced stage than patients with low TSH levels.

Keywords : Thyroid Stimulating Hormone (TSH), thyroid carcinoma, early stage, late stage, thyroidectomy