

**PERBEDAAN EKSPRESI Ki-67 PADA PASIEN KANKER TIROID
PAPILLARY NON METASTASIS DAN METASTASIS REGIONAL
DI RSUD DR. SOETOMO SURABAYA**

Eureka Nusra G. T. *, Maryono Dwi Wibowo**, Dyah Fauziah***

Peserta Program Pendidikan Dokter Spesialis (PPDS-I) Ilmu Bedah Umum

Fakultas Kedokteran Unair/RSUD Dr. Soetomo Surabaya

**Staf Pengajar SMF/Lab. Ilmu Bedah Fakultas Kedokteran Universitas

Airlangga/ RSUD Dr. Soetomo Surabaya

***Staf Pengajar SMF/Lab. Departemen Patologi Anatomi Fakultas Kedokteran

Universitas Airlangga/ RSUD Dr. Soetomo Surabaya

Abstrak

Pendahuluan: Insidensi karsinoma tiroid terus meningkat selama beberapa tahun terakhir. Di Amerika Serikat, insidensinya meningkat dengan rasio tahunan 5.4% pada laki-laki dan 6.5% pada perempuan. Berdasarkan data rekam medis di RSUD Dr Soetomo pada tahun 2014-2018, sebanyak 433 pasien dilakukan operasi pada kanker tiroidnya, sebanyak 190 (43,8%) diantaranya dilakukan total tiroidektomi dan sebanyak 109 (25,2%) diantaranya menjalani total tiroidektomi dengan Functional Neck Dissection. Kanker tiroid dengan metastasis KGB leher dan metastasis jauh memerlukan tindakan penanganan yang lebih sulit dan kompleks serta memerlukan biaya yang cukup tinggi misalnya pada tindakan functional neck dissection, radical neck dissection ataupun radiasi internal. Di sisi lain, peneliti menemukan bahwa sifat ekspresi Ki-67 dapat digunakan sebagai penanda proliferasi karsinoma sehingga peneliti ingin mencari tahu apakah pemeriksaan Ki67 dapat menjadi faktor prediktor pada kasus metastasis kanker tiroid

Metode Penelitian: Penelitian berupa penelitian analitik observasional dengan desain studi cross sectional. Subyek penelitian dilakukan pengambilan data umum subyek penelitian seperti nama, umur, dan jenis kelamin dicatat. Kemudian dari data tersebut dicatat hasil histopatologi dan dilakukan pemeriksaan imunohistokimia Ki-67 di laboratorium Patologi Anatomi RSUD Dr Soetomo.

Hasil Penelitian: Pada penelitian ini didapatkan total subyek penelitian sebanyak 30 orang. Pasien dengan usia terbanyak adalah diatas usia 50 tahun sebanyak 14 pasien (46,7%), usia 25 – 50 tahun sebanyak 10 pasien (33,3%), dan usia < 25 tahun sebanyak 6 pasien (20,0%) dengan rerata usia $47,57 \pm 2,867$ tahun. Dari 30 subyek penelitian, 15 pasien dilakukan total tiroidektomi dan FND (50%) dan 15 pasien dilakukan total tiroidektomi (50%). Dari penelitian ini didapatkan rerata ekspresi Ki-67 pada pasien kanker tyroid adalah $14,00\% + 2,904\%$. Nilai minimum ekspresi Ki-67 1% dan nilai maksimum ekspresi Ki-67 60%. Berdasarkan data, dilakukan uji statistik dengan Pearson ChiSquare, bahwa didapatkan perbedaan yang signifikan secara statistik dengan nilai $p = 0,029 (<0,05)$. Pada penelitian ini, dari hasil ekspresi Ki-67 pada kelompok metastasis kelenjar getah bening regional dan non metastasis kelenjar getah bening regional didapatkan nilai cut off point adalah 15%.

Kesimpulan: Dari penelitian ini didapatkan perbedaan yang signifikan antara ekspresi Ki-67 yang tinggi dan kecenderungan terjadinya metastasis kelenjar getah bening pada pasien dengan kanker tiroid papillary ($p=0,029$). Semakin tinggi tingkat ekspresi Ki-67 pada pasien kanker tiroid papillary, semakin tinggi kemungkinan terjadinya metastasis kelenjar getah bening regional.

Keywords: kanker tiroid, metastasis, Ki-67, tiroidektomi

THE DIFFERENCE OF Ki-67 EXPRESSION ON PATIENT WITH THYROID PAPILLARY CARCINOMA NON METASTASES AND REGIONAL METASTASES IN Dr. SOETOMO GENERAL HOSPITAL SURABAYA

Eureka Nusra G. T. *, Maryono Dwi Wibowo**, Dyah Fauziah***

*Resident of General Surgery Airlangga Medical Faculty/Soetomo General Hospital Surabaya

**General Surgery Department Airlangga Medical Faculty/Soetomo General Hospital Surabaya

***Anatomy Pathology Department Airlangga Medical Faculty/Soetomo General Hospital Surabaya

Abstract

Introduction: The incidence of thyroid carcinoma has continued to increase over the past few years. In the United States, the incidence is increasing at an annual ratio of 5.4% for men and 6.5% for women. Based on medical records at Dr. Soetomo Regional Hospital in 2014-2018, 433 patients underwent surgery for thyroid cancer, 190 (43.8%) had total thyroidectomy and 109 (25.2%) total thyroidectomy with Functional Neck Dissection. Thyroid cancer with regional lymph node metastases and distant metastases require more difficult and complicated actions which are quite high in cost of functional neck dissection, radical neck dissection or internal radiation. On the other hand, we found that the properties of Ki-67 can be used as markers of carcinoma proliferation, so we would like to find out whether examining Ki-67 can be a predictor in metastatic cases of thyroid cancer.

Methods: The study was an observational analytic study with a cross sectional study design. The general research subject data were collected and the histopathological results were recorded. Ki-67 immunohistochemistry was examined in the Anatomy Pathology laboratory of Soetomo General Hospital.

Research Results: In this study, a total of 30 research subjects were obtained. Patients with the most age were over 50 years old with 14 patients (46.7%), aged 25-50 years were 10 patients (33.3%), and aged <25 years were 6 patients (20.0%) with an average age 47.57 ± 2.867 years. From the 30 study subjects, 15 patients underwent total thyroidectomy and FND (50%) and 15 patients underwent total thyroidectomy (50%). From this study, the mean expression of Ki-67 in thyroid cancer patients was $14.00\% + 2.904\%$. The minimum value of Ki-67 expression is 1% and the maximum value of Ki-67 expression is 60%. Based on the data, a statistical test was performed with Pearson *ChiSquare*, that statistically significant differences were obtained with a value of $p = 0.029 (<0.05)$. Regional lymph obtained cut off point value is 15%.

Conclusion: From this study a significant difference was found between the high Ki-67 expression in non-metastases and regional lymph node metastases in patients with papillary thyroid carcinoma ($p = 0.029$). The higher the level of expression of Ki-67 in papillary thyroid carcinoma patients, the higher the possibility of regional lymph node metastases.

Keywords: thyroid carcinoma, regional metastasis, Ki-67, thyroidectomy