

HUBUNGAN SISTEM SKOR ACR-TIRADS PADA ULTRASONOGRAFI DAN BETHESDA PADA FNAB TERHADAP HASIL HISTOPATOLOGI PASCAOPERATIF PADA NODUL TIROID DI RSUP DR SARDJITO

Lukluk Purbaningrum¹, Teguh Aryandono², Artanto Wahyono²

¹Residen Ilmu Bedah, Departemen Ilmu Bedah, RSUP Dr. Sardjito, Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan, Universitas Gadjah Mada, Yogyakarta, Indonesia

²Divisi Bedah Onkologi, Departemen Ilmu Bedah, RSUP Dr. Sardjito, Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan, Universitas Gadjah Mada, Yogyakarta, Indonesia

Email : luklukpurbaningrum.md@gmail.com

Latar Belakang: Kanker tiroid dengan 3.3% kasus dan 0.95% kematian menempati urutan ke 12 kanker paling banyak di Indonesia pada tahun 2020. Deteksi dan intervensi kanker lebih awal menurunkan mortalitas dan morbiditas dengan ultrasonografi dan *ultrasound-guided fine needle aspiration biopsy*.

Tujuan: Mengetahui hubungan sistem skor ACR-TIRADS terhadap hasil histopatologi pascaoperatif, hubungan sistem skor Bethesda terhadap hasil histopatologi pascaoperatif, hubungan sistem skor ACR-TIRADS terhadap skor Bethesda, hubungan sistem skor ACR-TIRADS dan Bethesda terhadap hasil histopatologi pascaoperatif. Mengetahui sensitifitas, spesifisitas, NPV, PPV dan tes akurasi ACR-TIRADS terhadap histopatologi pascaoperatif, skor Bethesda terhadap histopatologi pascaoperatif, ACR-TIRADS dan Bethesda terhadap histopatologi pascaoperatif pada nodul tiroid

Metode: Penelitian analitik dengan *cross-sectional* untuk mengetahui hubungan antara sistem skor ACR-TIRADS dan Bethesda terhadap histopatologi pascaoperatif pada nodul tiroid di RSUP DR Sardjito dari Januari 2018 sampai 31 Desember 2023. Penelitian ini menggunakan SPSS statistik 25.0 dengan analisis uji chi-square dan uji diagnostik untuk mendapatkan sensitifitas, spesifisitas, NPV, PPV dan tes akurasi

Hasil: Hubungan sistem skor ACR-TIRADS terhadap hasil histopatologi, skor Bethesda terhadap histopatologi, skor ACR-TIRADS terhadap Bethesda, skor ACR-TIRADS dan Bethesda terhadap histopatologi pascaoperatif pada nodul tiroid di RSUP dr. Sardjito dengan nilai $p=0.00$. Sensitifitas, spesifisitas, NPV, PPV dan tes akurasi ACR-TIRADS terhadap hasil histopatologi pascaoperatif sebesar 93.51%, 17.48%, 37.89%, 86.21%, dan 44.09%. Sensitifitas, spesifisitas, NPV, PPV dan tes akurasi skor Bethesda terhadap histopatologi pascaoperatif sebesar 73,08%, 73.73%, 83.20 %, 59.38%, dan 72.85%. Sensitifitas, spesifisitas, NPV, PPV, tes akurasi ACR-TIRADS dan Bethesda terhadap histopatologi pascaoperatif sebesar 98.18%, 36.54%, 95%, 62.07%, dan 68.22%.

Simpulan: Terdapat hubungan skor ACR-TIRADS terhadap histopatologi

pascaoperatif, skor Bethesda terhadap histopatologi pascaoperatif, skor ACR-TIRADS terhadap skor Bethesda, skor ACR-TIRADS dan Bethesda terhadap histopatologi pascaoperatif. Sensitifitas ACR-TIRADS dan Bethesda terhadap histopatologi paling tinggi dibandingkan ACR-TIRADS saja dan Bethesda saja. Spesifisitas dan akurasi Bethesda lebih tinggi dibandingkan ACR-TIRADS

Kata Kunci: ACR-TIRADS, Bethesda, histopatologi, karsinoma, tiroid

THE RELATIONSHIP OF ACR-TIRADS SCORING SYSTEM ON ULTRASONOGRAPHY AND BETHESDA ON FNAB TO POSTOPERATIVE HISTOPATHOLOGY OUTCOMES IN THYROID NODULES AT RSUP DR SARDJITO

Lukluk Purbaningrum¹, Teguh Aryandono², Artanto Wahyono²

¹*Resident of Surgery, Department of Surgery, Dr. Sardjito General Hospital, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia*

²*Division of Surgical Oncology, Department of Surgery, Dr. Sardjito Hospital, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia*

Email : luklukpurbaningrum.md@gmail.com

Background: Thyroid cancer in 3.3% cases and 0.95% mortality ranks as the 12th most prevalent cancer in Indonesia at 2020. Early cancer detection and intervention reduces mortality and morbidity with ultrasonography and ultrasound-guided fine needle aspiration biopsy.

Objective: To know the relationship of ACR-TIRADS score to postoperative histopathology, Bethesda score to postoperative histopathology, ACR-TIRADS to Bethesda score, ACR-TIRADS and Bethesda score to postoperative histopathology. To determine the sensitivity, specificity, NPV, PPV and accuracy tests of ACR-TIRADS on postoperative histopathology, Bethesda score on postoperative histopathology, ACR-TIRADS and Bethesda on postoperative histopathology in thyroid nodules.

Method: Analytical study cross-sectional to determine the relationship between ACR-TIRADS and Bethesda scoring systems on postoperative histopathology in thyroid nodules at DR Sardjito Hospital from January 2018 to December 31, 2023. This study used SPSS statistics 25.0 with chi-square test analysis and diagnostic tests to obtain sensitivity, specificity, NPV, PPV and accuracy tests.

Results: The relationship of the ACR-TIRADS score to histopathology, Bethesda score to histopathology, ACR-TIRADS to Bethesda score, ACR-TIRADS and Bethesda scores to postoperative histopathology in thyroid nodules have a value of $p=0.00$. The sensitivity, specificity, NPV, PPV and accuracy tests of ACR-TIRADS on postoperative histopathology were 93.51%, 17.48%, 37.89%, 86.21%, and 44.09%. The sensitivity, specificity, NPV, PPV and accuracy tests of Bethesda score on postoperative histopathology were 73.08%, 73.73%, 83.20%, 59.38%, and 72.85%. The sensitivity, specificity, NPV, PPV, accuracy tests of ACR-TIRADS and Bethesda on postoperative histopathology were 98.18%, 36.54%, 95%, 62.07%, and 68.22%.

Conclusion: There was a relationship of ACR-TIRADS score to postoperative histopathology, Bethesda score to postoperative histopathology, ACR-TIRADS to Bethesda score, ACR-TIRADS and Bethesda score to postoperative histopathology. The sensitivity of ACR-TIRADS and Bethesda to histopathology was highest compared to ACR-TIRADS alone and Bethesda alone. The specificity and accuracy of Bethesda was higher than ACR-TIRADS

Keywords: ACR-TIRADS, Bethesda, histopathology, carcinoma, thyroid