



KORELASI ANTARA GAMBARAN **COMPUTED** **TOMOGRAPHY** DENGAN DERAJAT DIFFERENSIASI ADENOKARSINOMA KOLOREKTAL

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INTISARI

Latar belakang: Walaupun derajat differensiasi adenokarsinoma kolorektal dapat ditentukan dengan evaluasi sampel biopsi per endoskopi, namun dapat terjadi *bias sampling*, terutama pada kanker kolorektal ukuran besar yang ulseratif dan cenderung heterogen. *Computed Tomography Scan*, sebagai alternatif dapat memberikan informasi berguna mengenai derajat differensiasi tumor, sehingga dapat memprediksi prognosis pasien juga menentukan strategi terapeutik tepat.

Tujuan penelitian: Mengetahui korelasi antara gambaran pada MSCT *scan* abdomen dengan derajat differensiasi adenokarsinoma kolorektal pada pemeriksaan patologi anatomi.

Bahan dan Cara: Penelitian ini adalah studi observasional analitik uji korelasi *cross-sectional* dengan subjek retrospektif *non-random consecutive sampling*. Penelitian dilakukan di RSUP Dr. Sardjito Yogyakarta dengan sampel penelitian dari bulan Januari 2014 – Agustus 2019. Subjek penelitian adalah pasien dengan adenokarsinoma kolorektal yang telah menjalani pemeriksaan CT *scan* abdomen dan patologi anatomi disertai derajat diferensiasi tumor. Dilakukan analisis deskriptif karakteristik subjek dan uji *Spearman Correlation Coefficient* untuk mengetahui hubungan karakteristik CT *scan* abdomen dengan derajat diferensiasi adenokarsinoma kolorektal.

Hasil: Didapatkan 90 subjek, 48% laki-laki dan 52% perempuan. Rentang usia dari 32 hingga 81 tahun. Letak tumor dominan di rektosigmoid (87.78%). Uji *Spearman Correlation Coefficient* menunjukkan bahwa karakteristik gambaran pada CT abdomen : morfologi tumor memiliki nilai koefisien korelasi 0.398 dengan $p = 0.000$, pola penyangatan tumor memiliki nilai koefisien korelasi 0.558 dengan $p = 0.000$, bentuk *fat stranding* memiliki nilai koefisien korelasi 0.531 dengan $p = 0.000$, diameter limfonodi regional kolon memiliki nilai koefisien korelasi 0.258 dengan $p = 0.007$, dan tingkat penyangatan limfonodi regional kolon memiliki nilai koefisien korelasi 0.310 dengan $p = 0.002$.

Kesimpulan: Terdapat korelasi postif yang rendah antara morfologi tumor, diameter limfonodi regional kolon, dan tingkat penyangatan limfonodi regional kolon; dengan derajat differensiasi adenokarsinoma kolorektal. Terdapat korelasi positif yang *moderate* antara pola penyangatan tumor dan bentuk *fat stranding*; dengan derajat differensiasi adenokarsinoma kolorektal.

Kata kunci: MSCT *scan*, adenokarsinoma kolorektal, derajat diferensiasi



CORRELATION BETWEEN COMPUTED TOMOGRAPHY AND DIFFERENTIATION DEGREE OF COLORECTAL ADENOCARCINOMA

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ABSTRACT

Background: Eventough colorectal adenocarcinoma differentiation degree could be determined by evaluating biopsy samples per endoscopy, sampling bias could still happened mainly in big ulcerative colorectal cancer which tend to be heterogen. Computed tomography, as alternative could deliver useful information about tumor differentiation degree, which beneficially predict patient prognosis also determine precise therapeutic strategies

Objective: To understand the correlation between imaging characteristic on computed tomography and differentiation degree of colorectal adenocarcinoma

Materials and Methods: This was an observational correlation analysis study of cross-sectional design with retrospective non-random consecutive sampling. The study was conducted at RSUP Dr. Sardjito Yogyakarta in January 2014 - Agustus 2019. Research subjects were patients with colorectal adenocarcinoma tumors who had examined abdominal MSCT scan with and without contrast material and pathology examination with tumor differentiation. Descriptive characteristics analysis of subjects and *Spearman Correlation Coefficient* were performed to determine the relationship of MSCT scan findings and histopathologic finding.

Results: There were 90 subjects, 48% men and 52% women. Age ranges from 32 to 81 years old. The dominant location of tumors in rectosigmoid (87.78%). Spearman Correlation Coefficient test showed that abdominal CT characterization : tumor morphology had correlation coefficient value 0.398 with p = 0.000, tumor enhancement pattern had correlation coefficient value 0.558 with p = 0.000, fat stranding shape had correlation coefficient value 0.531 with p = 0.000, regional lymphnode diameter had correlation coefficient value 0.258 with p = 0.007, and enhancement degree of regional lymphnode had correlation coefficient value 0.310 with p = 0.002

Conclusion: There were low positive correlation between tumor morphology, colon regional lymph node diameter, and enhancement degree of colon regional lymph node; and differentiation degree of colorectal adenocarcinoma. There were moderate positive correlation between tumor enhancement pattern and fat strnading shape; and differentiation degree of colorectal adenocarcinoma.

Keywords: MSCT scan, colorectal adenocarcinoma, differentiation degree