

KORELASI TEBAL DINDING *VESICA URINARIA* DENGAN DOSIS KEMORADIASI PADA PASIEN KANKER SERVIKS

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INTISARI

Latar belakang : Kemoterapi dan radiasi digunakan untuk memperlambat laju pertumbuhan dan membunuh sel kanker dan keduanya dapat menyebabkan penebalan dinding vesica urinaria. Penelitian sebelumnya mengkonfirmasi adanya korelasi antara dosis kemoradiasi dengan penebalan dinding vesica urinaria.

Tujuan Penelitian : Mengetahui hubungan antara dosis kemoradiasi dengan tebal dinding vesica urinaria pada pasien kanker serviks

Bahan dan Cara : Penelitian ini adalah penelitian observasional kohort retrospektif dengan subyek dari data sekunder secara *consecutive nonrandom sampling*. Subyek penelitian adalah hasil MRI pelvis 1,5T pasien pascakemoradiasi di RSUP Dr. Sardjito Yogyakarta periode Maret 2017-Februari 2022 yang dikesankan sebagai sistitis pascakemoradiasi, tidak terdapat kelainan pada vesica urinaria dan terisi volume urin yang cukup. Dinding vesica urinaria dapat dikatakan menebal jika >3 mm saat distensi, >5 mm saat tidak distensi. Volume urin distensi adalah 400 ml. Radioterapi terdiri dari *External Beam Radiotherapy* (EBRT) dan *Brachytherapy* (BT). Kemoterapi terdiri dari Cisplatin, Carboplatin, Paclitaxel dan Fluorouracil. Dilakukan analisis bivariat dengan uji korelasi Spearman kemudian untuk mendapatkan *cutoff* dosis dengan analisis ROC dan analisis multivariat dengan uji regresi logistik.

Hasil : Diperoleh 48 subyek, median dosis radiasi 78 Gy, dosis Cisplatin 60 mg, Carboplatin 450 mg, Paclitaxel 220 mg, Fluorouracil 1000 mg, tebal dinding 4,9 mm. Hasil korelasi dosis radiasi $r = 0,255$ $p = 0,080$, Cisplatin $r = 0,224$ $p = 0,218$, Carboplatin $r = 0,169$ $p = 0,620$, Paclitaxel $r = 0,516$ $p = 0,191$, Fluorouracil $r = 0,391$ $p = 0,298$

Kesimpulan : Tidak terdapat korelasi signifikan dosis kemoradiasi dengan tebal dinding vesica urinaria

Kata Kunci : dosis, kemoradiasi, tebal dinding, vesica urinaria

CORRELATION OF URINARY BLADDER WALL THICKNESS WITH CHEMORADIATION DOSE IN UTERINE CERVICAL CANCER PATIENTS

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ABSTRACT

Background : Chemotherapy and radiation are used to slow down the growth rate and kill cancer cells and both can cause bladder wall thickening. Previous studies confirmed the correlation between chemoradiation dose and bladder wall thickening.

Objective: To determine the relationship between chemoradiation dose and bladder wall thickness in cervical cancer patients.

Materials and Methods: This study was a retrospective cohort observational study with consecutive non-random sampling as the subject of secondary data. The research subjects were the results of 1.5T pelvic MRI of post-chemoradiation patients at Dr. Sardjito Yogyakarta for the period March 2017-February 2022 which was suggested as post-chemoradiation cystitis, there were no abnormalities in the urinary bladder and filled with sufficient volume of urine. The bladder wall can be said to be thickened if it is >3 mm when distended, >5 mm when not distended. The volume of distended urine is 400 ml. Radiotherapy consists of External Beam Radiotherapy (EBRT) and Brachytherapy (BT). Chemotherapy consists of Cisplatin, Carboplatin, Paclitaxel and Fluorouracil. Bivariate analysis was performed with the Spearman correlation test and then to obtain the cutoff dose by ROC analysis and multivariate analysis by logistic regression test.

Results: There were 48 subjects, the median radiation dose was 78 Gy, Cisplatin 60 mg, Carboplatin 450 mg, Paclitaxel 220 mg, Fluorouracil 1000 mg, wall thickness 4.9 mm. Correlation results of radiation dose $r = 0,255$ $p = 0,080$, Cisplatin $r = 0,224$ $p = 0,218$, Carboplatin $r = 0,169$ $p = 0,620$, Paclitaxel $r = 0,516$ $p = 0,191$, Fluorouracil $r = 0,391$ $p = 0,298$

Conclusion: There is no significant correlation between chemoradiation dose and bladder wall thickness

Keywords: dose, chemoradiation, wall thickness, urinary bladder