Titik potong magnetic resonance imaging sekuens apparent diffusion coefficient untuk membedakan lesi tumoral dan non tumoral pada karsinoma nasofaring pasca terapi = Cut of value of magnetic resonance apparent diffusion coefficient sequence for distinguishing tumoral and non tumoral lession in post treatment nasopharyngeal carcinoma

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Abstrak

Penilaian karakteristik asimetris dinding nasofaring pada karsinoma nasofaring KNF pasca terapi memiliki implikasi penting pada penatalaksanaan pasien, tetapi seringkali sulit untuk mendiferensiasikan antara lesi tumoral dan non tumoral menggunakan CT scan/ MRI konvensional. Penelitian ini bertujuan untuk mengetahui titik potong nilai ADC antara lesi tumoral dan non tumoral pada follow up MRI pasca terapi. Penelitian merupakan studi kesesuaian dengan pendekatan potong lintang antara nilai ADC dan histopatologi. Penelitian menggunakan data primer 21 pasien KNF pasca kemoradioterapi yang melakukan pemeriksaan MRI nasofaring di Departemen Radiologi RSUPN-CM pada Juni 2016-Oktober 2017. Range of interest dan pemetaan ADC nilai b 1000 s/mm2 diletakkan pada komponen solid. Rerata jarak terapi dan evaluasi MRI pasca terapi adalah 9,3 bulan. Rerata nilai ADC lesi tumoral 0,7 x 10-3 mm2/s SD 0,05 dan non tumoral 1,2 x 10-3 mm2/s SD 0,3. Pada uji independent T-test menunjukkan perbedaan bermakna secara statistik antara rerata nilai ADC tumoral dan non tumoral. Pada analisis ROC nilai ADC didapatkan titik potong 0,86 x 10-3 mm2/s AUC= 0,97; SE= 0,04 dengan nilai sensitivitas 100 dan spesifisitas 93,8. Berdasarkan uji McNemar nilai p> 0,005 menunjukkan bahwa tidak ada perbedaan bermakna antara temuan ADC dan histopatologi. Terdapat kesesuaian yang sangat kuat antara nilai ADC dan histopatologi untuk membedakan lesi tumoral dan non tumoral KNF pasca terapi. Pemeriksaan MRI sekuens DWI-ADC dapat digunakan untuk memberikan informasi tambahan pada kasus follow up KNF pasca terapi.
.....Assessment of nasopharyngeal wall asymmetric characteristics of post treatment nasopharyngeal carcinoma NPC has important implication for management of the patients, but it is often difficult to distinguish between non tumoral and tumoral lession by using CT scan conventional MRI. The objective is to assess ADC cut off values between tumoral and non tumoral lession on MRI follow up after treatment. This research is a conformity study with cross sectional approach between ADC values compared with histopathology. This study used primary data of 21 post chemoradiotherapy NPC patients, who were examined nasopharnygeal MRI at Radiology Departement of Cipto Mangunkusumo Hospital in June 2016 October 2017. Range of interest ROI and ADC mapping b value 1000 s mm2 were placed on solid components. Mean interval between therapy and post treatment MRI was 9.3 months. Mean ADC values of tumoral lesions were 0.7 x 10 3 mm2 s SD 0.05 and non tumoral lession 1.2 x 10 3 mm2 s SD 0.3 . Independent T test showed statistically significant difference between the mean ADC values in tumoral and non tumoral lesions. In ROC analysis, ADC cut off value was obtained 0,86 x 10 3 mm2 s AUC 0,97 SE 0,04 with 100 sensitivity and 93,8 specificity. Based on the McNemar test p 0,05 , there was no significant difference between ADC findings and histopathology. There is very strong suitability between ADC and histopathologic values to differentiate tumoral and non tumoral lession in post treatment NPC. DWI ADC can be used to provide additional information on follow up post treatment NPC.