Correlation of frequency of visits to clinical nutrition outpatient clinic with body weight and handgrip strength of head and neck cancer patients undergoing chemoradiation

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Background: Head and neck cancer patients who get chemoradiated are at risk of malnutrition and an increase in malnutrition of up to 88% at the end of chemoradiation. Side effects of chemoradiation in the form of xerostomia, mucositis, nausea or vomiting add to the decrease in nutritional status and functional capacity. Monitoring nutritional status, one of which is carried out by assessing body weight (BW) and hand-holding strength (HGS). BW and HGS assessments are a simple and minimally invasive way for people with head and neck cancer (HNC) compared to other examination tools such as body composition measuring devices, Dual Energy X-Ray Absorptiometry (DEXA), and require high costs. It is not yet known the frequency of optimal visits of HNC patients to the nutrition poly during the moradiation period. This study aims to see a correlation between the frequency of visits by HNC patients undergoing morbidity to BW and HGS.

Method: This study used the cross section method, conducted in RSCM Radiotherapy (IPTOR RSUPNMC). Subjects included as inclusion criteria were adult HNC patients, ages 19 to 59, who underwent chemoradiation in the last 10 fractions, and were willing to enter the study to be taken. BW measurements using omron® Karada-HBF-375 brand scales, hand grip strength using Jamar® handgrip on the dominant right hand of the subject.

Results: The weight of the subjects had an average of 55.6 ±12.34 kg, HGS had an average of 29.24±10.74 kg, and an average frequency of 1 time. Average energy intake 1225.96±501.22 kcal, median protein 41 g, average fat 33.5±18.8g and KH 182.2±78.3g. Correlation between the frequency of visits to BW (r= 0.61, p= 0.66) and HGS (r=0.06, p= 0.64).

Conclusion: There was no correlation between the frequency of visits to BW and HGS.

Keywords: head and neck cancer, hand grip strength, body weight, clinic visits

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