

عنوان مقاله:

Changes of parotid and submandibular glands caused by Radiotherapy—an ultrasound evaluation

محل انتشار:

کنفرانس کشوری علوم پرتوی: نقش پرتو در تشخیص و درمان (سال: 1397)

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خلاصه مقاله:

Objective: Radiotherapy may alter the normal morphology of salivary glands located in the radiation field. These changes could be evaluated safely by sonography; however, there have been few studies in this regard. This study is aimed at evaluating the sonographic changes of the parotid and submandibular glands in patients undergoing radiotherapy for head and neck malignancies. Methods: 20 patients (16 males and 4 females) with head and neck malignancies who had been referred for radiotherapy to the Qaem Hospital in Mashhad, Iran, entered the study.Length, height, depth, echotexture, echogenicity and margins of parotid and submandibular glands were evaluated in three stages (I, before radiotherapy; II, 2 weeks after radiotherapy; and III, 6-7 weeks after radiotherapy) using sonography. Peak systolic velocity (PSV), end diastolic velocity (EDV) and resistive index (RI) were also evaluated by Doppler sonography. Results: Significant differences in length, height and depth (p50.000, p50.000, and p50.39, respectively) and also echotexture, echogenicity and gland margins (p50.000) were observed before and after radiotherapy. Doppler sonography results showed no significant differences regarding PSV, EDV and RI between sonographic stages. Echotexture and echogenicity were the only independent parameters that showed significant differences in sonographic stages I and II (p50.000). Length in stage I and II (p50.000) and echogenicity in stage III (p50.038) were the only parameters that showed significant differences between the two glands. Conclusion: Radiotherapy may change the echotexture, echogenicity and margins of the salivary glands from homogenic to .heterogenic, hyperechoic to hypoechoic and regular to irregular, respectively, and may reduce their size

کلمات کلیدی:

Radiotherapy, ultrasound, submandibular glands

لینک ثابت مقاله در پایگاه سیویلیکا:





