World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

Reduction of Patient's Dose of I-131 Therapy by Used Local Diuretic Juice

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Abstract : The aim of the study is to compare the results of the external exposure and the range of the dose spread by the patients, hospitalized in two different groups of 3-5 d receiving radioiodine therapy because of thyroid cancer, and one of group were giving the local diuretic plant (barley) as local juice. The control group was 28 patients they were isolated as international precautions after taken I-131 capsule 100 mCi, and their external exposure was recorded day by day after first 24 hrs. and the distance for external measurement was 1 m at the abdominal level. The mean of external exposure values of patients at fourth day were $30.24\pm12.92~\mu\text{Sy}~h-1$. The second group after taking I-131 capsule 100 mCi we were given barley juice (250 mL) after every meal three times on day and their external exposure was recorded day by day after first 24 hrs. The mean of external exposure values of patients of this group at third day was $26.92\pm9.89~(14-55)~\mu\text{Sy}~h-1$. It was observed that the external exposure from the second group clearly decreased to low levels which contributed to the decrease in patient dose and also to the decrease in the exposure from the patient to his/her family.

Keywords: local diuretic juice, therapy, radiation medicine, diuretic plant

Conference Title: ICSRD 2020: International Conference on Scientific Research and Development

Conference Location : Chicago, United States **Conference Dates :** December 12-13, 2020