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S54. Musculoskeletal Ionizing Radiation Exposure Related Health Results in Nurses: Four Case Reports

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As a result of increased use of ionizing radiation in medicine; health care workers who expose to ionizing radiation are under risk of radiation related severe health problems such as malignancies. We report four cases of nurses who worked in ionizing radiation using units for long years.

CASE 1:

55 year-old woman was admitted to occupational medicine outpatient clinic with papillary thyroid cancer diagnosis. She had total thyroidectomy operation three years ago. She had been working as a nurse and performing or assisting fluoroscopically-guided procedures for 32 years in algology department of anesthesiology clinic.

CASE 2:

53 year-old woman was admitted to occupational medicine outpatient clinic with papillary thyroid cancer diagnosis. She had total thyroidectomy operation one year ago. She had been working as a nurse at the same department and making the same job with Case 1 for 32 years.

CASE 3:

52 year-old woman was admitted to occupational medicine outpatient clinic with irregular cold thyroid nodule. She had been working as a nurse at the same department and making the same job with the previous cases for 16 years.

CASE 4:

31 year-old woman was admitted to occupational medicine outpatient clinic with suspected follicular neoplasm. She had been working as a nurse for 14 years in angiography laboratory.

They all reported that dosimetry and appropriate personal protective equipment was available in their unit for just last two years. They all didn't have family history of malignancy.

Conclusion:

Radiation exposure is a well-known etiological factor for thyroid neoplasms. As emphasized above, occupational radiation exposure related cancers are still a problem for health care workers in Turkey. We need to improve the education level of health care workers on radiation risks and establish properly designed control programs for occupational radiation exposure in health care workers.

Key Words: Thyroid neoplasm, ionizing radiation exposure, occupational malignancy