

Fine Needle Aspiration Biopsy of Thyroid Nodules

Authors : Ilirian Laçi, Alketa Spahiu

Abstract : Big strums of thyroid glandule observed by a simple viewing can be witnessed in everyday life. Medical cabinets evidence patients with palpable nodes of thyroid glandule, mainly nodes of the size of 10 millimeters. Further, more cases which have resulted in negative under palpation have resulted in positive at ultrasound examination. Therefore, the use of ultrasound for diagnosing has increased the number of patients with nodes of thyroid glandule in the last couple of decades in all countries, Albania included. Thus, there has been evidence of an increased number of patients affected by this pathology, where female patients dominate. Demographically, the capital shows high numbers due to the high population, but of interest is the high incidence of those areas distanced from the sea. While regarding related pathologies, no significant link was evidenced, an element of ancestry was evident in the nodes of the thyroid glandule. When we talk of nodes of the thyroid glandule, we should consider hyperplasia, neoplasia, and inflammatory diseases that cause nodes of the thyroid glandule. This increase parallels the world's increase of the incidence of thyroid glandule, with malign cases, which are at about 5% and are not depended on size. Given the numbers, with most thyroid glandule nodes being benign, the main objective of the examination of the nodes was the determination of benign and malign cases to avoid undue surgery. Subject of this study were 212 patients that underwent fine-needle aspiration (FNA) under ultrasound guidance at the Medical University Center of Tirana. All the patients came to the Mother Teresa University Hospital from public and private hospitals and other polyclinics. These patients had an ultrasound examination before visiting the Center of Nuclear Medicine for a scintigraph of thyroid glandule in the period September 2016 and September 2017. To correlate, all patients had been examined via ultrasound of the thyroid glandule prior to the scintigraph. The ultrasound included evaluation of the number of nodes, their size, their solid, cystic, or solid-cystic structure, echogenicity according to the gray scale, the presence of calcification, the presence of lymph nodes, the presence of adenopathy, and the correlation of the cytology results from the Laboratory of Pathological Anatomy of Medical University Center of Tirana.

Keywords : thyroid nodes, fine needle aspiration, ultrasound, scintigraphy

Conference Title : ICRMI 2022 : International Conference on Radiology and Medical Imaging

Conference Location : Istanbul, Türkiye

Conference Dates : August 16-17, 2022