SCINTIGRAPHY OF MALIGNANT THYROID TUMOURS Ivana Zagar Summary

The paper reviews briefly the role of various radiopharmaceuticals for scintigraphic diagnosis and follow-up of thyroid malignancies. The emphasis is given to thyroglobuline quantification and 131-I whole-body scintigraphy as specific and accurate methods in the follow up of differentiated thyroid cancer. Recombinant human TSH is introduced as a promising, safe and effective method to stimulate 131-I uptake and Tg secretion without the disadvantages of induced hypothyroidism. High sensitivity and specificity of 99mTc(V)-DMSA scintigraphy is pointed out, both for detection of primary medullary thyroid carcinoma and follow-up of clinically apparent and occult recurrence of the disease, as well as the limited role of 131-I-MIBG and Octreoscan imaging of MCT. 18F-FDG-PET is described as especially useful for revealing 131-I non-avid cervicomediastinal thyroid carcinoma metastases with agressive clinical behaviour.