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**Tytuł pracy:** Uptake of Technetium-99m MDP on bone scintigraphy and SPECT/CT in pulmonary amyloidosis – case report.

**Temat:**

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**Abstrakt:**

We present a case of increased uptake of Technetium-99m MDP in lung tissue observed in bone scintigraphy performed in a patient in the course of lung adenocarcinoma.

A 71-years old patient had undergone an upper lobectomy of the left lung due to pulmonary adenocarcinoma. The follow-up CT chest examination described an ambiguous sclerotic bone remodeling of the thoracic spine and several nodular lesions of the lung - the largest in the PS2 and LS6 segments. He came to the Nuclear Medicine Department for a bone scan to explain the unresolved changes in the thoracic spine.

The Whole Body Scan performed after 99mTc-MDP administration revealed increased tracer accumulation in the projection of the first right rib and the sixth left rib, and diffuse increased uptake in the thoracic spine. Additionally performed SPECT / CT showed that the increased tracer uptake is not in the above-mentioned ribs, but in the pleural nodules of the lung (in the PS2 and LS6 segment). After delving into the patient's history, it turned out that a few years earlier the patient had undergone a wedge resection of the right lung due to amyloidosis. The above-mentioned lung lesions were also described in preoperative PET/CT examination with moderate FDG uptake. In SPECT/CT the increased uptake in the thoracic spine was more precisely assessed, showing the increased sclerotization of the articular surfaces of the spine, most likely in the course of degenerative changes.

Taking into account the patient's history and the tendency to uptake phosphonate compounds by changes in the course of amyloidosis, we concluded that the visible lesions in the lungs are a pathology caused by amyloidosis.

In conclusion, when assessing bone scintigraphy in patients with both cancer and amyloidosis history the obtained image should be interpreted particularly carefully, analyzing the patient's medical records and using the SPECT/CT examination to avoid misinterpretation and overstaging.