

Pneumoconiosis mimicking lung metastases of medullary thyroid carcinoma

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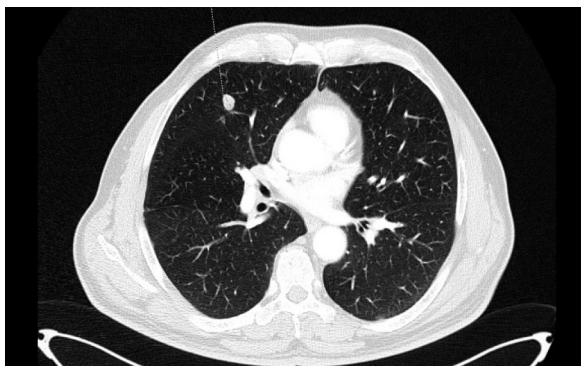


Figure 1. CT images of the thorax showing a pulmonary nodule in the 5R segment

A 63-year-old man diagnosed with pT3N1b medullary thyroid carcinoma (MTC) was referred for further consultation three months after a total thyroidectomy with a left lateral lymphadenectomy. On admission the levels of carcinoembryonic antigen (CEA) and calcitonin (CT) were slightly elevated (CT – 51.1 pg/ml; CEA – 5.13 ng/ml). The patient underwent radiotherapy three months after surgical treatment. A follow-up CT of the thorax performed after the subsequent three months, revealed numerous pulmonary nodules (fig. 1) and a mediastinal lymphadenopathy (fig. 2) suspected of metastases. CT levels remained elevated (43 pg/ml) with a decrease of CEA level equally (3.61 ng/ml); the patient did not exhibit any respiratory symptoms. A histopathological examination of the retrieved lymph nodes did not show any abnormalities. Since the possibility of metastases could not be ruled out, the patient underwent an anterior thoracotomy. The removed lung masses unveiled black-grey nodules which turned out to be pneumoconiosis.

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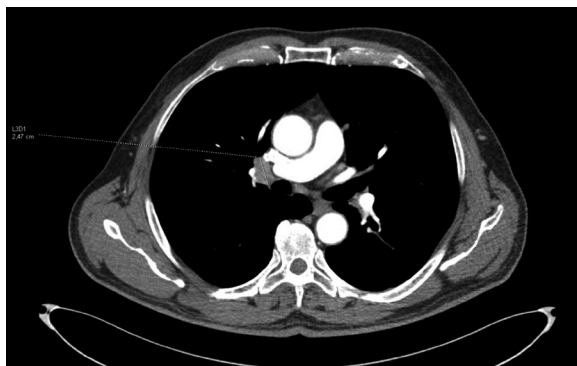


Figure 2. CT images of the thorax showing a right hilar lymphadenopathy

The patient history revealed exposure to dust and fumes. This is the first described case of pneumoconiosis mimicking MTC metastases. What is particularly worthy of attention is the short period of time from the radical surgery to the occurrence of initially absent multiple pulmonary lesions with a relatively insignificant growth of calcitonin. This pattern is characteristic for singular nodular MTC metastases rather than multiple micronodular metastases in solid organs [1]. It is worth emphasizing that in such cases we should take into consideration different respiratory system comorbidities, including occupational diseases.

References

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