

AB010. Incidental discovery of thymic masses during syndrome coronavirus type 2 (SARS-CoV-2) infection

Roberto Buonaiuto^{1#}, Annarita Peddio^{1#}, Aldo Caltavuturo¹, Rocco Morra¹, Pietro De Placido¹, Marianna Tortora², Erica Pietroluongo¹, Margaret Ottaviano³, Sabino De Placido^{1,2}, Giovannella Palmieri², Mario Giuliano^{1,2}

¹Department of Clinical Medicine and Surgery, University Federico II, Naples, Italy; ²Rare Tumors Coordinating Center of Campania Region (CRCTR), Naples, Italy; ³Oncology Unit, Ospedale del Mare, Napoli, Italy

[#]These authors contributed equally to this work.

Correspondence to: Roberto Buonaiuto. Department of Clinical Medicine and Surgery, University Federico II, Via Sergio Pansini, 5, 80131 Naples, Italy. Email: buonaiuto.roberto@libero.it.

Abstract: Recently, syndrome coronavirus type 2 (SARS-CoV-2) infection outbreak has determined the use of thoracic CT scan for diagnostic purposes, leading to incidental detection of mediastinal masses. However, the differential diagnosis between benign and malignant mediastinal neoplasms could be challenging. Furthermore, in a recent study, thymus hyperplasia was observed significantly more frequently in COVID 19 patients compared to controls. Here, we describe a case series of patients with incidental detection of mediastinal masses after COVID 19 infection. (I) The first patient was a 43-year-old male, who performed a CT scan in December 2020 after COVID infection, showing a hypodense lesion of 48×31 mm in the superior anterior mediastinum. Subsequently, the patient developed dysphagia, difficulty in swallowing and right eye ptosis, thus he underwent FDG-PET scan that revealed an uptake of the tracer with a standardized uptake value (SUVmax) of 6. Therefore, thymectomy by robotic assisted surgery was performed. The histological diagnosis was: “thymoma AB, Stage: pT1 a”. (II) The second patient was a 33-year-old female, who performed in January 2021 high resolution chest CT scan, after COVID infection, due to persistence of breath shortness and fatigue. Imaging detected a mass of about 30 mm in the anterior mediastinal space, although a subsequent FDG-PET scan showed no significant tracer uptake. The patient, who

is still symptomatic, is currently in follow up. (III) The third patient, a 36-year-old female, performed in April 2021 a chest CT scan due to persistent respiratory distress syndrome, related to SARS-Cov-2 infection that was contracted during pregnancy. The imaging was performed after delivering and showed a solid wedge-shaped lesion of 26 mm in the thymic loggia. The FDG PET scan carried out in June 2021 showed tracer uptake (SUVmax 2.7) in anterior mediastinal space. The patient was initially candidate to thymectomy, but due to the size reduction of the thymic mass observed on a follow-up CT scan, she was deemed eligible for follow up. In conclusion, our experience suggests that differential diagnosis in young symptomatic patients experiencing mediastinal masses after COVID infection is challenging and requires multidisciplinary expertise.

Keywords: Syndrome coronavirus type 2 (SARS-CoV-2); benign/malignant lesion; mediastinal masses

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Footnote

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