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Title: From CTPA-proven pulmonary embolism to patients clinical characteristics

Dr. Natalia 24544 Stoeva njstoeva@dir.bg MD 1, Prof. Galia 24545 Kirova gal.kirova@gmail.bg MD 2, Diana 24546 Lekova dianalekova@mail.bg MD 1, Anna 24547 Benova abenova@abv.bg MD 1 and Anton 24548 Penev anton.penev@abv.bg MD 1. 1 Pulmonary Department, Second Clinic of Internal Diseases, Tokuda Hospital Sofia, Sofia, Bulgaria, 1407 and 2 Imaging Department, Tokuda Hospital Sofia, Sofia, Bulgaria.

Body: In the last decade, Computer tomographic pulmoangiography (CTPA) has become established as “a gold standard” for the diagnosis of pulmonary embolism (PE). It gives us not only a reliable diagnosis, but also information on the amounts and localizations of the thrombotic masses. This gives us reason to look back from CTPA to the patient. The aim is to draw useful information on the PE-related patients characteristics. In 222 patients with CTPA-proven PE we analyze age, underlying diseases, symptoms, D-dimer and pulmonary artery pressure (PAP) with respect to CTPA findings. The mean age of our patients is 59.64 years, 40.5% are over 65 years old, 18% - under 40. The prominent underlying diseases are: heart failure in 30.1%; cancer in 20.3%; 20.7% have had recent surgery. 32.4% of the patients have unprovoked PE. They are younger. The most frequent PE symptom is dyspnea - in 88.2%, chest pain – in 51.3%, swelling of leg(s) - in 46.8%, cough - 40.5%, haemoptysis - 13.5%. According to the thrombotic burden in CTPA, the patients are graded into 3 groups: small PE (one or two segmental branches involved) (11.8%); submassive - less than 50% of the pulmonary circulation involved (42.3%) and massive - ≥ 50% involved (45.9%). D-dimer does not differ significantly between groups, but if we are looking only at the unprovoked PE, D-dimer is significantly higher in the higher burden levels (p=0.05). PAP differs significantly between groups (p=0.01). 7 patients were haemodynamically unstable. 9 stable patients were fibrinolyzed based on CTPA. Our conclusion is that clinical characteristics of PE are related to CTPA-defined thrombotic burden. CTPA is not only a diagnostic tool, but also guides us in the therapeutic choice.