

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 4682

**Publication Number:** P3667

**Abstract Group:** 1.1. Clinical Problems

**Keyword 1:** Comorbidities **Keyword 2:** No keyword **Keyword 3:** No keyword

**Title:** Carotid wall intima-media thickness (IMT) in COPD patients

Dr. Zoran 30690 Arsovski arso66@yahoo.com MD <sup>1</sup>, Prof. Dr Miroslav 30693 Gavrilovski arso66@yahoo.com <sup>1</sup>, Prof. Dr Biserka 30755 Kaeva bkaeva@hotmail.com <sup>1</sup>, Dr. Kamelija 30756 Busljetic bbkamelija@yahoo.com <sup>1</sup> and Prof. Dr Anita 30757 Arsovska anita70mk@yahoo.com <sup>2</sup>. <sup>1</sup> Allergology Unit, Clinic of Pulmonology and Allergy, Skopje, Macedonia, The Former Yugoslav Republic of, 1000 and <sup>2</sup> ICU, Clinic of Neurology, Skopje, Macedonia, The Former Yugoslav Republic of, 1000 .

**Body:** Background: Chronic obstructive pulmonary disease (COPD) can be associated with important comorbid diseases, including atherosclerosis of the blood vessels. Carotid wall intima-media thickness (IMT) is a marker of subclinical atherosclerosis. It can be non-invasively measured by B-mode duplex ultrasonography. Aim: To investigate the correlation between COPD and carotid atherosclerosis, as well as the associated risk factors. Material and methods: We performed carotid B-mode duplex ultrasonography in 55 patients with COPD, aged  $55.4 \pm 9.5$  years and 20 healthy subjects as a control group. Increased IMT was defined as  $\geq 1.2$  mm. We evaluated the associated risk factors (gender, age, hypertension, hyperlipidemia, smoking). Results: Twenty-two patients (40%) with COPD and 6 patients (20%) without COPD had increased IMT ( $p < 0.05$ ). COPD patients with increased IMT were older smokers, with hypertension and increased lipid levels. No gender differences were noted ( $p > 0.05$ ). Conclusion: We found positive correlation between COPD and increased carotid wall IMT. However, further studies are needed that would include larger number of patients to find whether this association is due to COPD only, or due to the mutual influence of the associated risk factors.