

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 4139

**Publication Number:** P2602

**Abstract Group:** 4.3. Pulmonary Circulation and Pulmonary Vascular Disease

**Keyword 1:** Pulmonary hypertension **Keyword 2:** Embolism **Keyword 3:** Telemedicine

**Title:** Symptom-related telephone monitoring and cardiopulmonary exercise testing in the pulmonary embolism follow-up for early detection of chronic thromboembolic pulmonary hypertension (CTEPH)

Dr. Matthias 26087 Held matthias.held@missioklinik.de MD <sup>1</sup>, Mr. Alexander 26088 Hesse alexander-hesse@gmx.net <sup>1</sup>, Dr. Regina 26089 Holl regina.holl@missioklinik.de MD <sup>1</sup>, Dr. Tobias 26090 Romen tobias.romen@missioklinik.de MD <sup>1</sup>, Dr. Franziska 26103 Walter franziska.walter@missioklinik.de MD <sup>1</sup>, Mrs. Gudrun 26101 Huebner gudrun.huebner@missioklinik.de <sup>1</sup> and Prof. Dr Berthold 26091 Jany berthold.jany@missioklinik.de MD <sup>1</sup>. <sup>1</sup> Internal Medicine, Respiratory Medicine and Cardiology, Mission Medical Hospital, Wuerzburg, Bavaria, Germany, 97067 .

**Body:** The incidence of CTEPH as a serious complication of pulmonary embolism (PE) varies between 0.5-8%. There are currently no established structured follow-up programs for early detection of CTEPH. We prospectively studied the follow-up of patients with newly diagnosed PE to evaluate a symptom-related approach which is based on a telephone monitoring program. Patients were contacted after three, six, 12, 24 and 36 months. Patients were further studied if one item of a five item-questionnaire was positive. further imaging studies and right heart catheterization were performed in case that echocardiography or/and cardiopulmonary exercise testing (CPET) revealed abnormalities suggestive of pulmonary hypertension. We report the results from our 3 months- follow-up and 18- months interim analysis. 3-months follow-up: n=104. Telephone interview suggesting abnormalities: n=32 (29,8 %). Pathological echocardiography: n=7, normal n= 25: CPET n=20: pathological CPET n =7, normal n =13. Further diagnostic work-up: n=15. Diagnosis CTEPH: n=7. Interim analysis after 18 months: n =123:Diagnosis CTEPH: n=10 .3 out of 10 patients had shown a pathological CPET despite normal echocardiographic findings. The symptom-related follow-up program which is based on a telephone-monitoring and a 5 item-questionnaire detects patients with chronic-thromboembolic pulmonary hypertension. Cardiopulmonary exercise testing may serve as a complementary diagnostic tool. Telephone monitoring and cardiopulmonary exercise testing should be included in a pulmonary embolism follow-up program for early detection of CTEPH.