

## Others

### [MSB-43]

#### **Pulmonary Endarterectomy in Chronic Thromboembolic Pulmonary Hypertension: Our Initial Experience**

Selim Aydın<sup>1</sup>, Bahar Temur<sup>1</sup>, Yakup Tire<sup>2</sup>, Ozgen Ilgaz Koçyiğit<sup>3</sup>, Bedrettin Yildizeli<sup>4</sup>, Ersin Ereğ<sup>1</sup>

<sup>1</sup>Department of Cardiovascular Surgery, Acibadem University School of Medicine, İstanbul, Türkiye

<sup>2</sup>Department of Cardiovascular Surgery, Acibadem University Atakent Hospital, İstanbul, Türkiye

<sup>3</sup>Department of Anesthesiology and Reanimation, Acibadem University Atakent Hospital, İstanbul, Türkiye

<sup>4</sup>Department of Thoracic Surgery, Memorial Ataşehir Hospital, İstanbul, Türkiye

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E-mail: selim.aydin@acibadem.com

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**Objective:** This study aimed to share the early results of the pulmonary endarterectomy program recently implemented in our clinic in the treatment of chronic thromboembolic pulmonary hypertension.

**Methods:** Eighteen patients (10 females, 8 males; mean age: 46 years) who underwent pulmonary endarterectomy between October 2022 and August 2024 were included in the retrospective study. Perioperative and follow-up data, including age, in-hospital mortality, and the length of intensive care unit and hospital stays after pulmonary endarterectomy, were evaluated.

**Results:** The majority of the patients (n=16) were New York Heart Association class III or IV before surgery. According to the University of California, San Diego level classification, almost all patients had at least level 1 and 2 lesions in one or more pulmonary artery (n=17). Cardiopulmonary bypass time, cross-clamp time, and total circulatory arrest time were 174.8±16.6, 34.7±12.2, and 21.7±6.2 min, respectively. The in-hospital mortality rate was 5.5% (n=1), and the morbidity rate was 16.6% (n=3). Extracorporeal membrane oxygenation was performed on two patients (one venoarterial, one venovenous). Both patients were successfully weaned off ECMO. However, the patient who received venoarterial ECMO died due to multiorgan failure in the second postoperative month. After pulmonary endarterectomy, the durations of mechanical ventilation, intensive care stay, and hospital stay before discharge were 6.1±13.1, 17.8±14.7, and 20.01±13.9 days, respectively. The systolic and mean pulmonary artery pressure fell from 97.6±22.6 and 63.1±18.1 mmHg before surgery to 42.5±12.8 and 25.7±6.1 mmHg after surgery.

**Conclusion:** Pulmonary endarterectomy is a highly effective treatment for chronic thromboembolic pulmonary hypertension, providing dramatic clinical improvement in the early term with acceptable mortality and morbidity rates.

**Keywords:** Chronic thromboembolic pulmonary hypertension, pulmonary endarterectomy.



**Figure 1.** Type 1 thrombo-embolic specimen removed from both right and left pulmonary artery.