

**SEVERE RESPIRATORY DISTRESS CAUSED BY CENTRAL AIRWAY
OBSTRUCTION TREATED WITH SELF-EXPANDABLE METALLIC STENTS**

R. M. Mroz¹, K. Kordecki², M. D. Kozłowski³, A. Baniukiewicz⁴, A. Lewszuk², Z. Bondyra²,
J. Laudanski³, A. Dabrowski⁴, and E. Chyczewska¹

¹Pulmonary Department, ²Radiology Department, ³Thoracic Surgery Department, and
⁴Gastroenterology Department, Białystok Medical University, Białystok, Poland;
robmroz@wp.pl

We investigated retrospectively the efficacy of self-expandable metallic stents (SEMS) placement for treatment of severe respiratory distress in patients with central airway obstruction (AO). On admission, all thirty three patients presented with severe respiratory distress symptoms and hypoxia. In all cases central airway obstruction caused by neoplastic infiltration were treated with SEMS, using fiberoptic bronchoscopy method. We found an intraluminal obstruction present in 7 patients, extraluminal compression in 10 patients. Combined stenosis (intraluminal obstruction and extraluminal compression) was present in 16 patients. Tumor infiltration occupied more than 90% of the endoluminal diameter in 21 patients, 70% in 9, and 50% in 3 patients. Obstruction was caused by primary lung cancer in 23 patients, thyroid carcinoma in 5, and primary carcinoma of esophagus in 5 patients. In all cases 1 – 2 stents per patient were placed. Double stenting (esophagus and trachea) was required in six patients. All 33 patients exhibited symptomatic improvement after stent placement. Significant improvement was noticed in arterial blood gas analysis and O₂ saturation. The mean follow-up was 65 days, ranging from 5 to 752 days. We conclude that SEMS are useful for the treatment of severe respiratory distress caused by extraluminal and intraluminal stricture in the central airways and the overall effect of SEMS for stenosis is related to the degree of infiltration and of tumor progression itself.