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**Title:** Dynamic MDCT in the diagnosis of tracheomalacia in cicatricial stenosis of the trachea

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**Body:** Efficiency of surgical treatment of cicatricial stenosis of the trachea and the development of postoperative complications (restenosis) depends, including the presence and severity of tracheomalacia. **PURPOSE.** Diagnosis and severity of tracheomalacia in cicatricial stenosis of the trachea, based on changes in the diameter and the thickness of the wall during the forced breathing during dynamic computed tomography (DCT). **MATERIALS AND METHODS.** DCT conducted in 30 patients, in 28 verified cicatricial tracheal stenosis in 2 patients - nontracheal thoracic pathologies. Analyzed the assessment criteria for intubation, including wall thickness, type of narrowing of the lumen, the shape of the lumen, the location and extent of tracheomalacia. The greatest diagnostic value of the measurement of the cross-sectional area of the lumen on inspiration and expiration. This percentage was calculated for the collapse of the lumen of the trachea at maximal inspiration, took away the lumen of the trachea at the end of exhalation, divided by the area at a breath, and then multiplied by 100 (Boiselle P. Imaging of the large airways // Clin Chest Med. 2008. V. 29. P. 181-193). **RESULTS.** Tracheomalacia often accompanies cicatricial stenosis of the trachea. Percentage wears off trachea  $\geq 50\%$ , as the current diagnostic criteria, accepted as having tracheomalacia. In our study in 21 of 30 patients determined collapse of the lumen of the trachea, which is greater than the data traheobronchoscopy, in 3 out of 30. **CONCLUSIONS.** Dynamic MDCT is a promising method in the diagnosis of tracheomalacia in cicatricial stenosis of the trachea and can play an important role in the choice of surgical treatment.