

Pulmonary Rehabilitation

Final Exam Topics:

1. Physiology of breathing, Biomechanics of breathing;
2. Methods to measure breathing patterns;
3. Respiratory rehabilitation – definition, goals and objectives;
4. Risk factors of respiratory diseases, risk stratification;
5. Acute and chronic obstructive and restrictive diseases; Breathing patterns;
6. Cardio-vascular and pulmonary preferred practical patterns;
7. Diagnosis and Functional tests for respiratory system; Spirometry
8. 6-minute walking test;
9. Pulmonary pathology. Chronic Obstructive Pulmonary Disease;
10. Baseline Dyspnea Index (BDI),
 1. Emphysema, Chronic bronchitis, Asthma
 2. Cystic fibrosis; Bronchiectasis;
 3. Idiopathic pulmonary fibrosis;
 4. Assessment of outcomes of respiratory diseases;
 5. Main principles of respiratory rehabilitation;
 6. Indications for respiratory rehabilitation;
 7. Contraindications for respiratory rehabilitation;
 8. Elaboration of respiratory rehabilitation program;
 9. Evaluation of patient with respiratory disease;
 10. Exercise stress testing, exercise and activity tolerance;
 11. Evaluation of hypoxemia level during physical exercise;
 12. Assessment of ventilatory, upper and lower extremities muscle strength;
 13. Assessment of ability to perform activities of daily living, cognitive function and degree of depression;
 14. Physical exercise selection and prescription;
 15. Supervised and independent exercises, exercise aids;
 16. Specific exercise limitations in chronic obstructive pulmonary disease;
 17. Multidisciplinary approach to respiratory rehabilitation;
 18. Ventilatory therapy: airway management, breathing training strategies, energy conservation and work simplification techniques;
 19. Breathing techniques – diaphragmatic breathing, pursed-lip breathing, forward-bending exercises;

20. Chest physical therapy – postural drainage, chest percussion, and vibration;
21. Ventilatory muscle strength and endurance training;
22. Specificity of outcome assessment in respiratory rehabilitation;
23. Education of the patient regarding the disease, self-management skills
- 24.** Oxygen therapy; artificial ventilation, assisted respiration.
25. Current approach to rehabilitation management of patients with chronic cardio-pulmonary failure.