An Approach to Interpreting Spirometry

Interpreting Spirometry Results

Determine if the test is interpretable.

Access FVC, FEV₁, and absolute FEV/FVC ratio.

- FVC decreased, FEV₁ decreased or normal, absolute FEV/FVC < 0.7
  - Restrictive ventilatory impairment
  - Referral to pulmonary laboratory for static lung volumes
  - DLCO, DLCOVA, ERV
  - Determine severity.
  - MVV < 40 × FEV₁
    - Consider poor patient effort, neuromuscular disease, possible airway lesion.
  - MVV > 40 × FEV₁
    - Referral to pulmonary laboratory for static lung volumes.
    - Determine severity.

- FVC normal or decreased, FEV₁ decreased, absolute FEV/FVC < 0.7
  - Obstructive ventilatory impairment
  - Perform bronchodilator challenge test.
  - More than 12 percent increase in FEV₁ and 200 mL increase in FVC or FEV₁,
  - or
  - 15 to 25 percent increase in FEF₂⁵⁻⁷⁵
    - Yes
      - Reversible airway disease
      - Determine severity.
    - No
      - Obstructive ventilatory impairment
      - Determine severity.

- FVC normal, FEV₁ normal, absolute FEV/FVC > 0.7
  - Normal spirometry

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