



## Critical Tracheal Stenosis in a Patient with Relapsing Polychondritis

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### Clinical Image

A 31-year-old otherwise healthy woman presented to our emergency department with complaint of gradual onset of dyspnea. Stridor breathing sound was detected on physical examination. Laboratory findings revealed CO<sub>2</sub> retention. Neck plain film showed segmental tracheal stenosis (Figure 1). Epinephrine inhalation and intravenous high dose steroid were prescribed and dyspnea subsided gradually. Computed tomography-generated virtual bronchoscopy disclosed critical tracheal stenosis in subglottic region (Figure 2). After serial examinations, relapsing polychondritis was diagnosed. She underwent multiple courses of pulse immunosuppression therapy but had minimal effect. She underwent tracheostomy eventually. Relapsing polychondritis, an immune-mediated disease associated with cartilage inflammation, predominantly involves the nose, ear and

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Figure 1: Neck plain film showed segmental tracheal stenosis (arrow) in the subglottic region.



Figure 2: Computed tomography-generated virtual bronchoscopy showed abrupt tracheal stenosis in subglottic segment (3.6 mm vs. 20.6 mm).

laryngo-tracheo-bronchial tree. The diagnosis is often delayed due to non-specific symptoms at the onset. The mainstay of treatment is the use of non-steroidal anti-inflammatory drugs and systemic corticosteroids. Tracheobronchial involvement with critical stenosis is fatal and surgical intervention could be necessary [1].

## References

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