Severe E-Cigarette, or Vaping, Product Use Associated Lung Injury Requiring Venovenous Extracorporeal Membrane Oxygenation

1. **PRESENTATION**
   A 16-year-old girl with gastrointestinal and respiratory symptoms:
   - 134 beats per minute
   - 94% on room air
   - WBC count 34,600/mm3

2. **PICU ADMISSION**
   Respiratory failure and bilateral pulmonary ground-glass opacities on CT (Day 1):
   - 94% on nasal cannula

3. **TREATMENT**
   High-dose methylprednisolone 1 mg/kg bid, empiric antibiotics.

4. **ECMO INITIATED**
   Pneumomediastinum with tension pneumothoraces and a persistent air leak
   - 13 cannulated
   - 28 decannulated
   - 32 hypoxemia and hypercarbia
   - 32 cannulated
   - 42 tracheostomy placement
   - 62 decannulated

5. **DISCHARGE**
   The pt was discharged to an inpatient rehabilitation program. (Day 93)

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**DON'T FORGET TO ASK!**
Ask about vaping in patients presenting with gastrointestinal and respiratory symptoms.

This patient reported a history of vaping e-cigarettes containing either nicotine or delta-9-tetrahydrocannabinol oil prior to symptom onset.