

A Case of the Week

Case 405

A fifty-two-year-old female presented in our hospital with a dentist in a local clinic for right swollen face after treatment of toothache. She received root canal treatment with NAOCL gas for upper 4 tooth cavities. Swollen face worsened after dental treatment. Then, she came to our hospital for an emergency (Figs. 1-3).

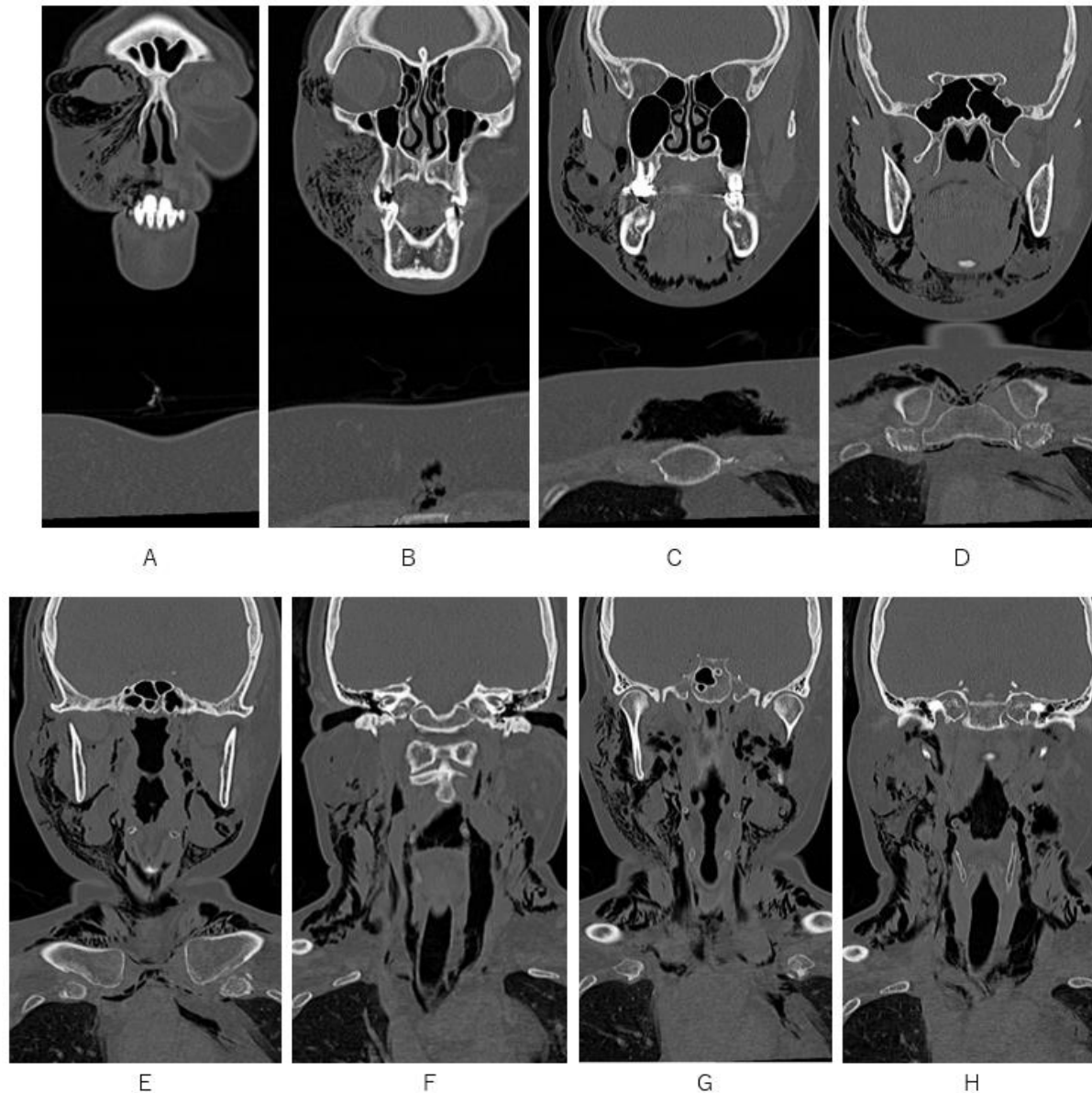


Fig.1 Massive air retention right-sided-predominantly in spaces of peri-eyelid (A, B), peri-masseter muscles (C-H), peri-jaw muscles (B-E), peri-neck muscles (E-H), is depicted on coronal face and neck CT. Further, air retention in para-pharyngeal space (F-H), mediastinum (D-H), is depicted.

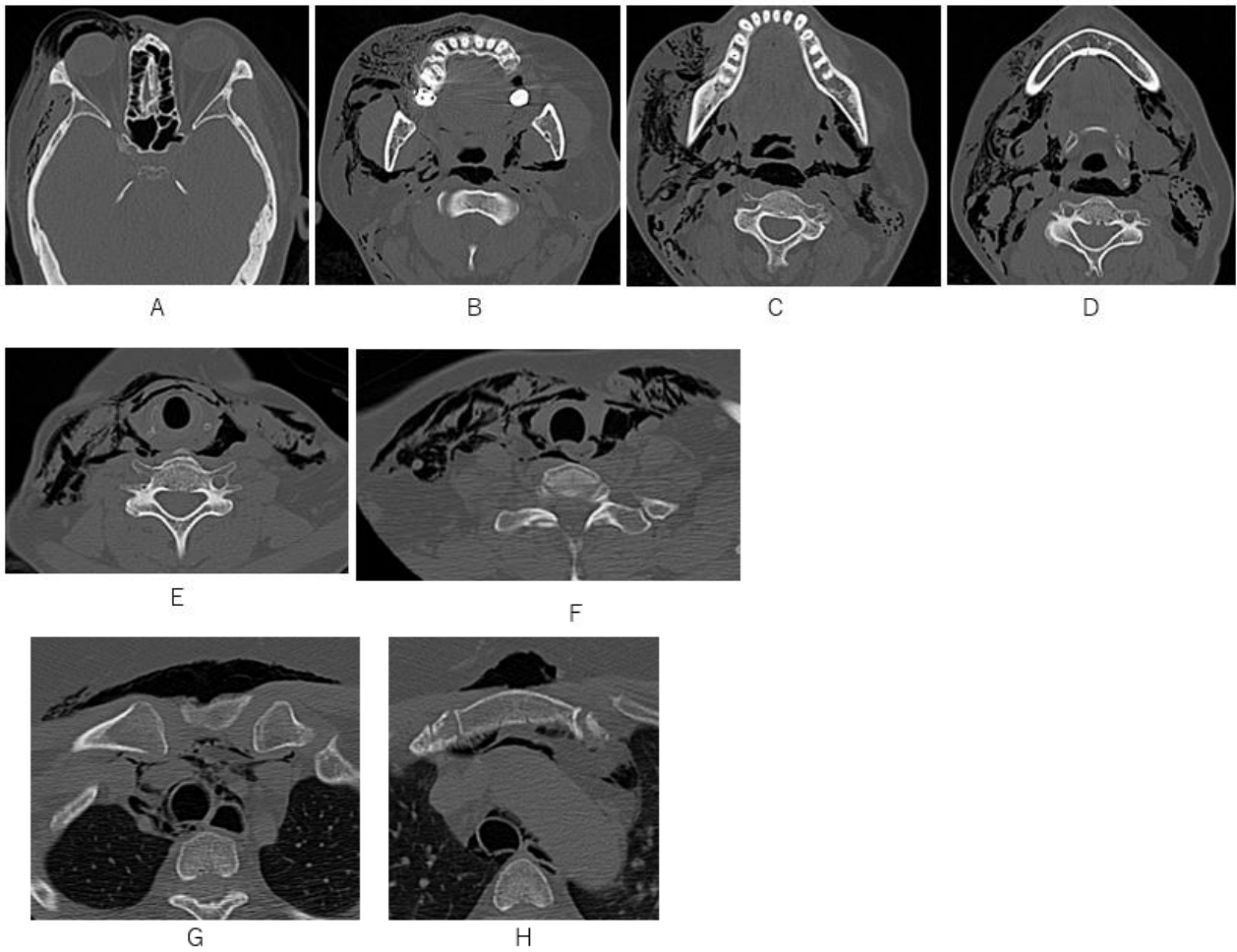


Fig. 2 Massive air retention right-sided-predominantly in spaces of peri-eyelid (A), peri-masseter muscles (B-D), peri-jaw muscles (C, D), peri-neck muscles (C-H), is depicted on axial face and neck CT. Further, air retention in para-pharyngeal space (B-D), mediastinum (G,H), is depicted. Note air spaces of posterior pharyngeal space (B-D) and para pharyngeal space (B-D) communicate with those of posterior mediastinum and anterior mediastinum, respectively.

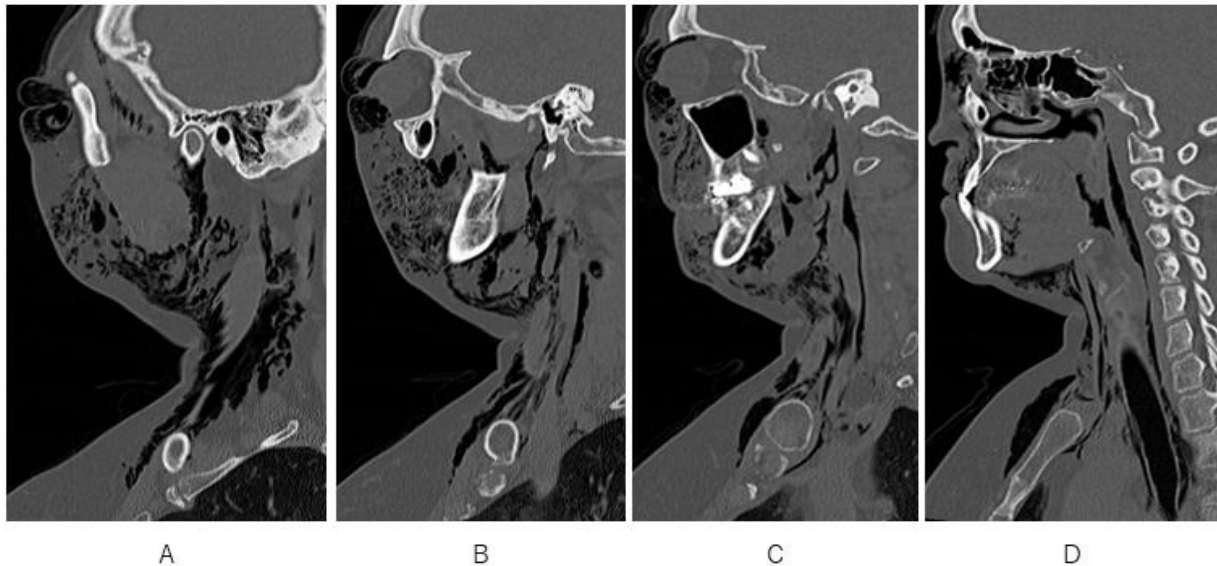


Fig. 3 Massive air retention right-sided-predominantly in spaces of peri-eyelid (A), peri-masseter muscles (A, B), peri-jaw muscles (B-D), peri-neck muscles (A-D), is depicted on sagittal face and neck CT. Further, air retention in para-pharyngeal space (B, C), mediastinum (G,H), is depicted . Note that posterior parapharyngeal space communicate with posterior mediastinum space (D) and parapharyngeal space communicate with anterior mediastinum space (B-D).

What is an imaging diagnosis?

1. Phlegmon
2. Skin muscle contusion
3. Pneumothorax with subcutaneous emphysema
4. Subcutaneous emphysema, pharyngeal emphysema, mediastinal emphysema

answer

2025.9.26