

Clinical Image

Streptococcus constellatus Pneumonia Invading the Chest Wall: A Rare Presentation

Neumonía por *Streptococcus constellatus* con invasión de pared torácica:
una presentación rara

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A 33-year-old woman with uncontrolled diabetes presented with a complaint of pleuritic chest pain, cough and greenish sputum. She reported unintended weight loss and fever. The patient was a regular cannabis and tobacco smoker. She had advanced periodontal disease (Fig. 1A) and decreased breath sounds in the right hemithorax. A firm, tender lump measuring 15 cm was palpated on the right side of the chest. X-ray and computed tomography

revealed right-sided atelectasis with necrosis and small pleural effusion. A contiguous collection of soft tissue was also observed at the depth of the chest wall (Fig. 1B–D). Uniportal video-assisted thoracoscopic surgery to explore and drain the pleural space was performed, followed by drainage of the chest wall abscess. The procedure revealed a small amount of pleural fluid and several parenchymal adhesions that were removed, and a collection of

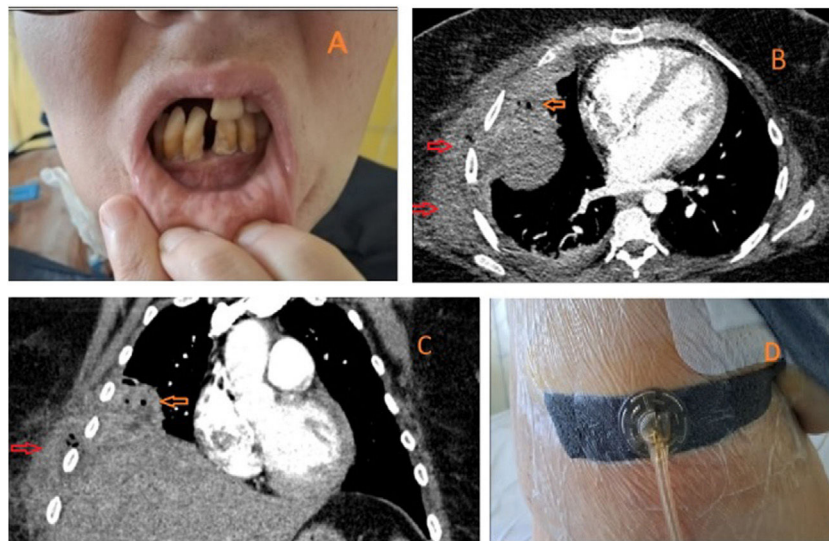


Fig. 1. (A) Severe gingival retraction with pyorrhea and missing teeth. (B, C) Chest CT, axial and coronal images. Necrotic atelectasis of the middle and lower lobe (orange arrows), contiguous to a heterogeneous hyperdensity with mass effect in the chest wall (red arrows). Gas is seen within both lesions. (D) On day 3 after surgery, negative pressure wound therapy was applied with the use of 3M™ ActiV.A.C.™ device to accelerate the scarring process.

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pus below the serratus anterior muscle and around the sixth intercostal space. Pus and lung biopsy cultures grew penicillin-sensitive *Streptococcus constellatus*. Intravenous amoxicillin-clavulanate 2 g q8 h was administered from the outset for a total of 15 days, followed by 875 mg q8 h by mouth for another week.

Streptococcus constellatus is a facultative anaerobic gram-positive cocci belonging to the *Streptococcus anginosus* group and is known to cause lung abscesses and empyema.^{1,2} A necrotic pneumonia invading the chest wall is a rare finding. Treatment requires a combination of surgery and antibiotics.^{1,2} The patient was encouraged to comply with her anti-diabetic regime, undergo teeth removal, and quit smoking.

Informed consent

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Authors' contributions

1. Substantial contributions to the conception or design of the work: J.N.E., D.B.B.C., R.G.L.
2. Acquisition, analysis, or interpretation of data for the work: J.N.E., D.B.B.C., R.G.L.
3. Drafting the work or revising it critically for important intellectual content: J.N.E., D.B.B.C., R.G.L.
4. Final approval of the version to be published: J.N.E., D.B.B.C., R.G.L.
5. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved: J.N.E., D.B.B.C., R.G.L.

Conflicts of interest

The authors declare no conflicts of interest.

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