



Spontaneous rib fracture improved with callus following acute severe cough in pregnancy

Spontaneous rib fracture

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Fracture healing is an exceptional wound healing response in which the repair process takes place with production of new bone tissue. There are three consecutive and interconnected phases: inflammatory response, repair, and remodeling phases.¹ Coughing is usually self-limited and uncomplicated, but sometimes it can be associated with complications; one of these complications is rib fracture. Cough-induced rib fracture has been reported in the literature, particularly in patients with chronic obstructive pulmonary disease.²

In this report, we present a case of spontaneous rib fracture improved with callus formation following acute severe cough during pregnancy. A 42-year-old female presented to our department with left posterolateral chest pain. The patient had experienced acute pneumonia with severe coughing attacks accompanied by chest pain in the eighth month of pregnancy. On physical evaluation, she had severe tenderness and a palpable hard callus over her left lower chest wall. There was no history of any thoracic trauma. A chest X-ray did not reveal any fracture, but chest computed tomography revealed spontaneous fracture of the left ninth and tenth ribs with callus formation (Figure 1, 2).

The patient was followed with analgesic treatment, and no complications were observed during follow-up. In conclusion, cough-induced rib fractures are a rare complication during pregnancy. Repetitive mechanical stress due to high intrathoracic and intra-abdominal pressure during pregnancy may be a contributing risk factor.

Declarations

Animal and Human Rights Statement: All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments.

Informed Consent: Written informed consent was obtained from the patient for publication of this case report and accompanying images.

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Figure 1. The left ninth rib fracture with callus



Figure 2. The left tenth rib fracture with callus

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