



Figure 2 Chest X-ray after treatment.

Discussion and conclusion

Pneumothorax in newborns often develops secondary to an underlying lung pathology and mechanical ventilation therapy. Neonatal pneumothorax is more common in premature, postmature and male infants. Mortality is very high when pneumothorax is untreated or delayed treatment.⁵ Pneumothorax is most commonly encountered in the first three days. This is probably due to high transpulmonary pressure caused by the onset of new breathing.⁶ In our patient, she was born in 38th gestational week and girl gender. Spontaneous pneumothorax developed on the second day.

Pneumothorax may develop spontaneously. However, most infants have an underlying lung pathology. RDS, meconium aspiration syndrome, pulmonary hypoplasia and resuscitation at birth, positive pressure mechanical ventilation are reported as risk factors for pneumothorax and patient prognosis.⁷ Our patient had no underlying lung pathology and spontaneous pneumothorax occurred.

Pneumothorax is a life-threatening condition with high mortality. Currently, very high mortality rates (20-60%) are still reported. It is known that prognosis is better in patients without pulmonary parenchymal disease. However, the proportion of these patients is quite low. Mortality is very high especially in preterms whose gestational age is less than 29 weeks. Although there are risk factors that increase mortality in pneumothorax patients such as primary disease, prematurity, mechanical ventilator therapy, mortality can be reduced with early diagnosis and appropriate treatment.⁷⁻¹⁰

Early diagnosis of pneumothorax depends on clinical suspicion. Spontaneous pneumothorax should be kept in mind in the presence of sudden and refractory respiratory distress in the neonatal period. If pneumothorax is suspected, chest radiography should be performed. Patients diagnosed with pneumothorax should be immediately chest tube placement, patients with respiratory distress should be evaluated and given supportive treatment.

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Conflicts of interest

Author declares that there is no conflict of interest.

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