

Acute Respiratory Distress Syndrome in Diabetic Ketoacidosis

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Picture 1.



Picture 2.

Acute respiratory distress syndrome (ARDS) is a rare but serious complication of diabetic ketoacidosis (DKA) (1).

A 46-year-old woman was admitted to our hospital for DKA. Her laboratory tests revealed a pH of 6.9; bicarbonate, 1.9 mmol/L; glucose, 427 mg/dL; and glycated hemoglobin (HbA1c), 12.9%. Her urinary ketone bodies were strongly positive. A chest X-ray showed no abnormality (Picture 1). Fluid replacement and insulin treatment were started. The next day, she suddenly developed dyspnea. ARDS was diagnosed by the presence of hypoxemia with a partial pressure of arterial oxygen/fraction of inspiratory oxygen ratio <200 and bilateral pulmonary infiltration (Picture 2). Echocardiography excluded the presence of cardiac disease. She was successfully treated by positive pressure ventilation and continuous hemodiafiltration. She was later diagnosed as having type 1 diabetes.

ARDS may occur in DKA due to alteration in alveolar capillary membrane permeability (2). Our report highlights the importance of considering ARDS as a cause of acute hypoxemia during the treatment of DKA.

The authors state that they have no Conflict of Interest (COI).

References

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