



Hypocapnia Caused by a Cracked Water Trap

Çatlak Bir Su Tutucusundan (Water Trap) Kaynaklanan Hipokapni

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Capnography is prone to equipment-related issues. Normal and abnormal capnograms arising from patients or equipment should be understood for identifying and resolving these issues. The increase at the end of the CO₂ waveform in the present case indicated a possible leak in the water trap. Our images revealed a problem in the Luer lock connection. Cracks may occur in various stages, highlighting that care should be taken regarding the deterioration of water trap connectors. In our experience, judging water trap deterioration from the CO₂ waveform seemed difficult, but it may be suspected when the capnogram shows an extremely low ET-CO₂.

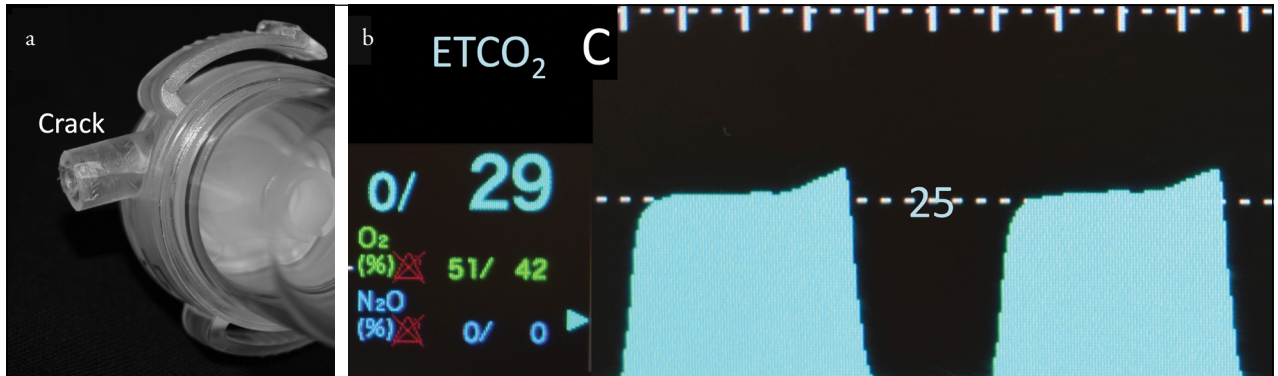


Figure 1. A cracked water trap and a capnogram. After endotracheal intubation in a patient, the side stream-type capnogram showed 24 mmHg of end-tidal (ET) carbon dioxide (CO₂), whereas arterial blood gas sampling revealed an arterial partial pressures of CO₂ of 44.2 mmHg. A crack was found in the connector of the water trap (Figure 1a). A capnogram with the cracked water trap showed an ETCO₂ of 29 mmHg (Figure 1b) with an increase at the end of the CO₂ waveform



Figure 2. A normal water trap and capnogram. A capnogram obtained with a new water trap (Figure 2a) revealed a an ETCO₂ of 37 mmHg (Figure 2b)