Microstream®
Capnography Used
for Non-Intubated
Patient with Severe
Dyspnea

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CASE STUDY

Profile
An 88 year old man had his wife call 911 when he became short of breath. His wife reported that he had an extensive respiratory history for which he was taking numerous medications, and that he had two previous myocardial infarctions. She also stated that he was on continuous home oxygen at 2 liters per minute.

EtCO₂ monitor used
Microstream® Hand Held Capnograph with an Adult Nasal FilterLine®

Clinical situation
When the paramedics arrived, the patient was sitting upright in a tripod position. The home oxygen rate had been increased to 3 L/min and the patient could speak two to three words between breaths. Respiration was labored and shallow. His skin was cool and diaphoretic. Lung sounds indicated rales and rhonchi in the bases and apices bilaterally. Moderate pedal edema was also found. Initial SpO₂ reading was 69% and EtCO₂ was 17 mmHg with a RR of 36 per minute.

Clinical situation
Paramedics placed a non-rebreather mask on the patient with 100% oxygen at a rate of 15 L/min. SpO₂ increased to 89% and EtCO₂ increased to 25 mmHg. Respiratory rate changed to 28 per minute, shallow and labored. The paramedics administered Nitroglycerin and Lasix and transported the patient to the nearest ED. When patient care was transferred to the ED staff, approximately 10 minutes after treatment, he could speak six words between breaths, his skin was warm and dry. SpO₂ was 95% and EtCO₂ was 35 mmHg.