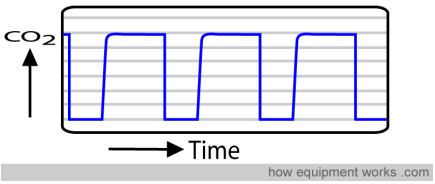
Diabetic and confused! Is this DKA? Use capnography!



You find a confused diabetic patient. Blood glucose is 300!

Why is he confused, does he suffer DKA, or should you look elsewhere?

In a recent study published on the West Journal of Emergency Medicine entitled "Predictive value of capnography for Suspected diagnosis in patient with diabetic ketoacidosis in the emergency depatment" the authors examined 181 patients with blood glucose above 250 mg / dl and suspected DKA. Sixty-two patients had DKA, defined as blood glucose 250 mg/dL, ketonuria, and metabolic acidosis (pH<7.3 or blood bicarbonate levels <15 meq/dL).

End tidal CO_2 values >24.5 mm Hg had a sensitivity and specificity of 0.90 for ruling out DKA

While this study found a level >24.5 mm Hg was best, other studies found higher values were needed to rule out the diagnosis.

What seems clear, however, is that normal capnography excludes DKA.

So next time you find a diabetic patient confused and hyperglycemic and you have to direct the diagnosis use capnography.