Diabetes Ketoacidosis Recovery in Newly Diagnosed and Established Youth with Type 1 Diabetes

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\textbf{INTRODUCTION}
At present, treatment for DKA is the same in both newly diagnosed and established patients with T1DM.

\textbf{RESULTS}
- The mean time to resolution of acidosis was significantly longer in patients with newly diagnosed (13± versus 8.5± hours) (p<0.001).
- PH at presentation did not differ between the groups.
- Bicarbonate at presentation was significantly lower in patients with newly diagnosed diabetes (p<0.001).
- Potassium and phosphorus levels were lower, and sodium and chloride levels were higher in patients with newly diagnosed diabetes (p<0.001).
- For each severity category, DKA recovery was shorter among those with established than new onset diabetes. (Figure 1)

\textbf{AIM}
- To examine and describe the differences in metabolic parameters & time-to-recovery from DKA, between those groups.
- We hypothesized that established T1DM patients would respond faster to treatment for DKA.

\textbf{METHOD}
A single center, retrospective study Cohort comprised 356 patients (405 DKA episodes) during 2008-2018.

\textbf{CONCLUSIONS}
- DKA in patients with established T1DM is associated with shorter recovery time than in patients with newly diagnosed diabetes, regardless of the severity of the DKA.
- This may have implications on the treatment of patients with established diabetes:
  - shorter intravenous treatment, with the possibility of less complications.
  - consider treatment in the emergency room or faster replacement with subcutaneous insulin.

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