A 10 year old girl was brought to casualty in an ambulance at 6:30 a.m. According to her parents, the child had been drinking incessantly and needing frequently to urinate for a few weeks. The day before she had become severely fatigued. They decided to bring her in because that morning they had been unable to wake her up and her breathing was abnormal. The child was taken to consultation and on seeing that her blood glucose was immeasurable was immediately admitted. The child was extremely sleepy with pronounced kussmaul breathing. Blood pressure was 91/30 mmHg, pulse 110/min. A cannula was promptly inserted and a blood gas analysis carried out which revealed severe metabolic acidosis and hyperglycaemia (pH 6.65, pCO2 29.1 mmHg, pO2 45.7 mmHg, bicarbonate 3.2 mmol/l, base excess (BE) 34.5 mmol/l, blood glucose 501 mg/dl).

Following the immediate commencement of fluid resuscitation with NaCl 0.9% the child was taken to intensive care where she underwent intravenous fluid resuscitation (total 120 ml/kg within first 24h), insulin therapy (18IU/kg/24 h), and electrolyte replacement (potassium requirement 5.5 mmol/kg/24 h) through which she recovered rapidly. The blood gas analysis and blood glucose normalized in the meantime. A sodium bicarbonate buffer was not necessary in the end. The patient was released from intensive care to the stationary ward after two days. Two years later, a healthy child (apart from having diabetes) is managing beautifully on intensified insulin therapy.