

Case study



Photo 1. Jazz, a 5-year-old male crossbreed.



Photo 2. Examination revealed pink mucous membranes

'Jazz' was a 5-year-old male crossbreed weighing 23 kg (*Photo 1*).

The owners reported that he had been off colour for 1 week, and completely anorexic for the last 2 days. There was no history of vomiting or diarrhoea. Physical examination at the time of admission revealed pale pink mucous membranes with a capillary refill time of 3 seconds (*Photo 2*).

Heart rate was 140/minute. Respiratory rate was 48/minute. Temperature was 38.6°C. Skin tenting was delayed. Mentation was depressed.

Jazz was assessed as 12% dehydrated and started on intravenous (IV) fluids using Hartmann's at a rate of 276 ml/hour (230 ml/hour to replace a dehydration deficit of 2760 mls in 12 hours plus 46 ml/ hour maintenance). A minimum database

consisting of packed cell volume, total protein, urea and glucose would normally have been done when the IV catheter was placed, but this was unintentionally overlooked.

Two hours later, Jazz was re-examined and noted to have dried sticky urine on his abdominal hair. Sticky urine caused suspicion of glucosuria. At that time, a minimum database was done and Jazz's glucose was 35 mmol/l. Both packed cell volume (55%) and total protein (78 g/l) were high (refer to *Table 1* for normal values). A urine sample was positive for glucose and ketones thus leading to a diagnosis of diabetic ketoacidosis. Insulin therapy was started.

Ideally Jazz' electrolytes would have been measured, but these were not available

in house. Diabetic dogs are at risk of hypokalaemia due to the diuresis that accompanies diabetes mellitus. Therefore Jazz was offered a bowl of reconstituted electrolyte powder mix, but refused to drink it. He was then offered Oralade and continued to drink it thirstily throughout the next day. The Oralade provided a good, safe source of sodium, potassium and chloride. Jazz went on to make a full recovery and is now on routine insulin therapy for his diabetes.

Case study outcome

This case illustrates how even a thirsty dog will avoid some classic rehydration products due to poor palatability. Oralade provided a safe, palatable source of both fluid and electrolytes.