

## **A not so common cause of diabetic ketoacidosis in a type 2 diabetic patient**

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Diabetic ketoacidosis (DKA) is a major acute complication in type 1 diabetes mellitus (T1DM) that requires immediate treatment and correction. However uncommonly DKA can also occur in type 2 diabetes mellitus (T2DM). We report a case in an 83-year-old T2DM with DKA due to an uncommon trigger.

She was diagnosed 10 years ago and was on biphasic insulin. She presented to emergency department feeling lethargic with polyuria and polydipsia. She was tachycardic and tachypnoeic but normotensive and afebrile with no obvious focus of infection. Her CBG was 26mmol/L, ketones 4.8mmol/L and pH 7.19 with bicarbonate of 14. She met the criteria for DKA and she was started on the appropriate management pathway for DKA. Despite resolution of DKA on day 2 and return to her normal biphasic insulin regime she remained tachypnoeic and tachycardic and lethargic.

Subsequent investigation of thyroid status revealed her thyroid stimulating hormone was <0.03 with free T4 level of 64.1ug/L. She was also thyroid stimulating hormone receptor (TSH-R) antibody positive confirming Grave's thyroid disease. She was then started on propranolol and carbimazole on day 5 with good resolution of her symptoms in 24 hours. On day 7 she was medically stable and referred on for physical rehabilitation on discharge. This case highlights the importance of identifying promptly the triggers for DKA, in this case thyrotoxicosis as appropriate management for both is required to prevent mortality and morbidity. Hyperthyroidism is not a commonly known cause of DKA and we recommend routinely testing for thyroid state in unexplained DKA.