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# DIABETICMedicine

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Diabetes UK
The charity for people with diabetes

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## Contents

*Original Articles:* original research studies of relevance to diabetes mellitus science and practice. Clinical science and clinically relevant basic science papers will be considered. Suggested length 2500–3000 words.

*Clinical Practice:* original articles focusing on issues directly related to the clinical presentations and management of diabetes mellitus.

*Short Reports:* brief (1500 words with one Figure and one Table and up to 30 references) reports of original or important observations. Rapid publication can be offered in this category.

*Case Reports:* descriptions of unusual clinical cases carrying a new or important message.

*Reviews:* often invited, but unsolicited reviews are welcomed. All will undergo peer review. Reviews should aim to be comprehensive and should include the search methodology used to find the source data. Suggested length 5000 words.

*Special Reports:* often, but not exclusively, publication of Diabetes UK reports of importance to the diabetes research and clinical practice community.

*Letters:* Comments on previously published papers, items of topical interest, and brief original communications are encouraged for consideration under this heading. The length, including references, should not exceed 800 words plus one figure or table. The letter should not normally be divided into sections. Please give the name and addresses of authors at the end of the letter.



## Submissions & Correspondence

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prognosis in the paediatric population is undefined. We report a case of an adolescent with newly diagnosed T1DM who had a peroneal neuropathy at presentation.

**Case report:** BF, a previously healthy 14 year old girl, presented in diabetic ketoacidosis after 5 weeks of polyuria and polydipsia. (Blood glucose level 35 mmol/l, pH 6.88 (NR7.35–7.45), pCO2 25 (NR 35–45 mmHg), HCO3 5.8 (NR 22–26 mmol/l), base deficit −28.6 (NR ± 2.5 mmol/l)). She had lost 12 kilograms of weight. She had a painful right calf and paraesthesia of her right foot. BF was commenced on subcutaneous insulin 24 hours after presentation. Seven days later, BF had weakness of her right leg, a high stepping gait with foot slapping. A neurological consult revealed *complete absence of active dorsiflexion and impaired eversion of her right foot.* Her lower limb tendon reflexes including plantar reflexes were normal and symmetrical. Inversion with ankle flexion was normal. Sensation was preserved bilaterally. Her cranial nerves were normal. A clinical diagnosis of isolated right sided common peroneal neuropathy was made. Biochemically; her thyroid function tests and full blood count were normal. XR fibula head normal. Her vitamin B12 levels were 75 and 109 mmol/l at 12 months (NR 118–716 mmol/l). Four months later, BF had mild residual weakness on dorsiflexion of her right foot. Reflexes were symmetrically present. Her HbA1c was 7.7%. (NR 4–6%). 12 months later, her HbA1c was 8.4% and her neuropathy had completely resolved.

## P215

### Non classical diabetes and its complications

J Prague[1], C Sinclair[1], M Lenman[1], K Muralidhara[1], M Prentice[2], R Guzder[1] and S Thomas[1]

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The failure to identify a secondary cause of diabetes at an early stage can have a significant impact on patient outcomes. However, the diagnosis is often difficult as clinical features can be shared with those of Type 2 diabetes. We report a case of 'Type 2 diabetes' later diagnosed as Cushing's syndrome. A 41-year-old Ghanian lady was referred for evaluation of suspected Cushing's syndrome after a hospital visit for a shin laceration where she was noted to be profoundly hypertensive. She had a five-year history of 'Type 2 diabetes' requiring early insulin therapy, refractory hypertension and chronic renal failure presumed secondary to hypertension and diabetes. On examination, she had Cushingoid facies, truncal obesity and proximal myopathy. She had malignant hypertension (220/110 mmHg) and grade 3 hypertensive retinopathy. Renal ultrasound demonstrated a 5 cm staghorn calculus. Further investigations confirmed non-ACTH dependent Cushing's syndrome (suppressed ACTH, low DHEA, high midnight cortisol). An MRI demonstrated a 3.4 cm left adrenal adenoma, which was removed laparoscopically. Her diabetes control improved post-surgery but her inpatient stay was prolonged due to malignant hypertension, acute-on-chronic renal failure and recurrent urosepsis. Hypertension was managed with five agents. She required laser photocoagulation. She has end-stage renal disease (eGFR 18 ml/min), visual acuities of 1/60 (right eye) and 3/60 (left eye) and is awaiting percutaneous nephrolithotomy for the staghorn calculus. This case highlights the importance of maintaining a high index of clinical suspicion of secondary diabetes in people with refractory hypertension/hyperglycaemia and/or rapidly progressive end-organ damage.

## P216

### Rapid resolution of cutaneous features of insulin resistance and extreme insulin allergy following bariatric surgery in a patient with Type 2 diabetes

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The potential for dramatic improvement in metabolic parameters of diabetes following bariatric surgery is well established. Here we present a case in which gastric bypass surgery was also associated with resolution of cutaneous features of severe insulin allergy. The patient, a 57 year old obese man (126 kg, BMI 43), presented with Type 2 diabetes aged 42. Insulin was initiated 5 years later with rapid escalation of dose to a peak >800 units/day . Subsequently, he developed severe generalised itching, multiple subcutaneous nodules and areas of biopsy-proven acanthosis nigricans. Investigation revealed a persistent eosiniophilia (1.45 $10^9$/l) and raised serum IgE (167 kU/l, ref. ULN <80 kU/l). Symptoms persisted with various insulins but improved with initiation of CSII using U500 human insulin, with resolution of nodules for 8 months. However symptoms and cutaneous features then recurred and persisted with increasing severity despite extensive antihistamine treatment. He then underwent a Roux-en-Y gastric bypass. Following this, there was an immediate fall in insulin requirements accompanied by immediate improvement in itching with complete regression of subcutaneous nodules and reduction in acanthosis within 6 weeks. Serum IgE fell (91 kU/L) and eosinophilia resolved. Over 6 months, weight fell by 29.6 kg and glycaemic control (HbA1c 7.0%) was achieved on 40 to 50 units insulin/day. The mechanism responsible for the rapid resolution of cutaneous insulin allergy is unclear; although reduced exposure to exogenous insulin may be contributory it may be speculated that surgery resulted in an additional effect that influenced the abnormal immunological response to insulin.

## P217

### Type 1 diabetes diagnosed in a 14 year old: wrong diagnosis and wrong treatment

AR Scott[1], S Ellard[2] and AT Hattersley[2]

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We report a 31 year old woman with recurrent severe hyperglycaemia, retinopathy and proteinuria. She was diagnosed with diabetes at 14 yr and treated with insulin. Throughout her teens she had repeated admissions with severe hyperglycaemia after insulin omission. She had an eating disorder and feared weight gain. She had 2 successful, insulin treated, pregnancies.Her son was diagnosed with transient neonatal diabetes (TNDM) soon after birth and treated with insulin for 8 months before reverting to normal glucose tolerance. There was no other family history. When reviewed aged 29 she had not taken insulin for the previous 2 years and her HbA1c was 15%. She weighed 48.3 kg (BMI 18.7), had extensive proliferative retinopathy and proteinuria (0.89 g/L). She was started on twice daily insulin but only took it intermittently if symptomatic. Six months later her random glucose was 52 mmol/l but was not

 