Nature Reviews Endocrinology **9**, 442 (2013); published online 11 June 2013; doi:10.1038/nrendo.2013.119; doi:10.1038/nrendo.2013.116; doi:10.1038/nrendo.2013.118; doi:10.1038/nrendo.2013.117

# **IN BRIEF**

# DIABETES

# Sleep apnoea in patients with type 2 diabetes mellitus

Furukawa and co-workers found that 45.4% of 513 Japanese patients with type 2 diabetes mellitus had nocturnal intermittent hypoxia, which is a surrogate marker of obstructive sleep apnoea. Patients who had nocturnal intermittent hypoxia were older and had a higher BMI, smoking rate and prevalence of hypertension, hyperlipidaemia, microalbuminuria and macroalbuminuria than those without the condition. The researchers suggest that nocturnal intermittent hypoxia might be an independent risk factor for microalbuminuria in Japanese women with type 2 diabetes mellitus.

**Original article** Furukawa, S. *et al.* Nocturnal intermittent hypoxia as an associated risk factor for microalbuminuria in Japanese patients with type 2 diabetes mellitus. *Eur. J. Endocrinol.* doi:10.1530/EJE-13-0086

# **PITUITARY FUNCTION**

# Acute hypocortisolaemia after traumatic brain injury

Hannon and co-investigators report that 78% of 100 patients with traumatic brain injury developed inappropriately low plasma cortisol levels following the injury; most of the low plasma cortisol levels were recorded during days 1–3 following hospital admission for the injury. Acute cortisol deficiency and cranial diabetes insipidus following traumatic brain injury was associated with subsequent mortality. Furthermore, acute hypocortisolaemia following injury was predictive of the development of chronic hypopituitarism.

**Original article** Hannon, M. *et al.* Acute glucocorticoid deficiency and diabetes insipidus are common following acute traumatic brain injury and predict mortality. *J. Clin. Endocrinol. Metab.* doi:10.1210/jc.2013-1555

# BONE

### Beige adipose tissue is beneficial for the skeleton

Beige adipose tissue is anabolic for bone, show Rahman and colleagues. Using mouse models and *in vitro* experiments, the researchers demonstrate that beige adipose tissue secretes factors, including IGFBP-2 and Wnt-10b, that target two types of bone cells for anabolic activity: osteoblasts and osteocytes. They suggest that beige adipose tissue could be targeted for the treatment of both metabolic and bone diseases.

Original article Rahman, S. et al. Inducible brown adipose tissue, or beige fat, is anabolic for the skeleton. Endocrinology doi:10.1210/en.2012-2162

# CARDIOVASCULAR ENDOCRINOLOGY

### Diabetic cardiomyopathy is attenuated by CYP2J2 in mice

Cardiac-specific overexpression of cytochrome P450 2J2 (CYP2J2) protects against diabetic cardiomyopathy induced by a high-fat diet and low-dose streptozotocin in transgenic mice, according to Ma and co-investigators. The researchers show that CYP2J2 overexpression improves cardiac function by reducing plasma glucose and insulin levels and improving glucose tolerance and cardiac glucose uptake. Ma *et al.* conclude that enhancement of the activation of epoxyeicosatrienoic acids has potential as a therapeutic strategy to prevent diabetic cardiomyopathy.

Original article Ma, B. et al. Cardiac-specific overexpression of CYP2J2 attenuates diabetic cardiomyopathy in male streptozotocin-induced diabetic mice. *Endocrinology* doi:10.1210/en.2012-2166