PP-PN-04

HIGHER FOLLICLE STIMULATING HORMONE WAS ASSOCIATED WITH POOR HANDGRIP STRENGTH AND GAIT SPEED IN OLDER MEN WITH TYPE 2 DIABETES

https://doi.org/10.15605/jafes.037.AFES.117

Serena Low,[1] Jonathon Khoo,[1] Tianmin Lu,[1] Chee Fang Sum,[2] Tavintharan Subramaniam,[2] Su Chi Lim[1]
[1]*Khoo Teck Puat Hospital, Singapore*
[2]*Admiralty Medical Centre, Singapore*
[3]*Lee Kong Chian School of Medicine, Singapore*
[4]*Saw Swee Hock School of Public Health, Singapore*

OBJECTIVES
Sarcopenia is characterised by age-related loss of muscle mass, strength and physical performance. It is accelerated in type 2 diabetes mellitus(T2DM). Higher follicle-stimulating hormone(FSH) reportedly contributes to muscle mass decline. The association between FSH with muscle strength and physical performance remains unknown. We aimed to investigate association between FSH and handgrip strength and gait speed in men with T2DM.

METHODOLOGY
We conducted a cross-sectional on male patients with T2DM. Serum FSH was measured using electrochemiluminescence immunoassay. Handgrip strength was measured using hand dynamometer and was low if <28 kg. Slow gait speed was defined as ≤0.8 m/s. Modified Poisson regression was used to examine relationship between FSH with handgrip strength and gait speed, adjusting for age and clinical covariates.

This research has been approved by an ethical committee.

RESULTS
There were 100 patients with mean age 63.3 ± 7.3 years. Forty percent had low handgrip strength and 51% had slow gait speed. Univariate analysis showed that Tertile 3 FSH was associated with low handgrip strength and slow gait speed with corresponding relative risk (RR) 1.96 (95% CI 1.07-3.57; p=0.028) and 1.74 (95% CI 1.06-2.85; p=0.027) compared to Tertile 1 FSH. The association persisted in fully adjusted model with RR 1.88 (95% CI 1.02-3.43; p=0.042) and 1.80(95% CI 1.03-3.16; p=0.040) for low handgrip strength and slow gait speed respectively.

CONCLUSION
Elevated FSH, likely indicative of subclinical primary hypogonadism, was independently associated with low handgrip strength and slow gait speed. Hence FSH may potentially be used to identify risk of poor muscle strength and physical performance in men with T2DM.

PP-PN-05

OSILODROSTAT IS EFFECTIVE AND WELL-TOLERATED IN ASIAN AND NON-ASIAN PATIENTS WITH CUSHING'S DISEASE: RESULTS FROM LINC 3 (PHASE III STUDY)

https://doi.org/10.15605/jafes.037.AFES.118

Akira Shimatsu,[1] Beverly Biller,[2] Maria Fleseriu,[3] Eun jig Lee,[4] Rattana Leelawattana,[5] Jung Hee Kim,[6] Rama Walia,[7] Andrea Piacentini,[8] Alberto Pedroncelli,[9] Rosario Pivonello[10]
[1]*Advanced Medical Care Center, Omi Medical Center, Kusatsu, Japan*
[2]*Neuroendocrine and Pituitary Tumor Clinical Center, Massachusetts General Hospital, Boston, USA*
[3]*Pituitary Center, Departments of Medicine and Neurological Surgery, Oregon Health & Science University, Portland, USA*
[4]*Pituitary Tumor Center, Severance Hospital, Yonsei University College of Medicine, Seoul, South Korea*
[5]*Prince of Songkla University, Songkhla, Thailand*
[6]*Department of Internal Medicine, Seoul National University College of Medicine, Seoul, South Korea*
[7]*Department of Endocrinology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India*
[8]*Recordati SpA, Milan, Italy*
[9]*Recordati AG, Basel, Switzerland*
[10]*Dipartimento di Medicina Clinica e Chirurgia, Sezione di Endocrinologia, Università Federico II di Napoli, Naples, Italy*

OBJECTIVES
Osilodrostat, a potent oral 11β-hydroxylase inhibitor, normalised mean urinary free cortisol (mUFC) in most patients with Cushing's disease (CD) during a Phase III study (LINC 3; NCT02180217). We describe outcomes for Asian and non-Asian patients enrolled in LINC 3.

METHODOLOGY
CD patients with mUFC>1.5x upper limit of normal (ULN) received osilodrostat during the 48-week (W) core phase. Patients benefiting from osilodrostat at W48 could enter an optional extension. Dose adjustments were permitted (maximum dose 30 mg bid). Data are reported separately for Asian and non-Asian patients.

RESULTS
Twenty eight percent of patients were Asian (39/137) and enrolled in Korea (n = 14), Japan (n = 9), India (n = 7), Thailand (n = 5) and China (n = 4). Most non-Asian patients were Caucasian (n = 89/98;91%). Median (range) osilodrostat exposure from baseline to study end was 115 (1–194) weeks in Asian patients and 141 (4–245) weeks in non-Asian patients, median (range) osilodrostat dose was 3.7 (1–18) and 10.1 (1–47) mg/day, respectively. The mUFC was ≤ULN in 62% (24/39) of Asian and 68% (67/98) of non-Asian patients at W48, increasing to 68% (21/31) and 87% (65/75), respectively, at W72. Improvements in cardiovascular parameters were observed in both groups during osilodrostat treatment. Hypocortisolism-related adverse events, mostly of mild or moderate severity, occurred in 64% (25/39; n = 2 discontinued) of Asian and 50% (49/98; n = 3 discontinued) of non-Asian patients.

CONCLUSION
Beneficial effects of osilodrostat were similar in Asian and non-Asian patients in terms of biochemical control and clinical improvement, although Asian patients generally received lower doses. Osilodrostat was well tolerated in both groups.

PP-PN-06

SUCCESSFUL USE OF RITUXIMAB TO TREAT GLUCOCORTICOID RESISTANT LYMPHOPLASMACYTIC HYPOPHYSITIS: A CASE REPORT

https://doi.org/10.15605/jafes.037.AFES.119

Kavinga Gamage, Sivatharshya Pathmanathans, Manilka Sumanatilleke, Ashley Grossman
National Hospital of Sri Lanka, Colombo 10, Sri Lanka

BACKGROUND
Lymphoplasmacytic hypophysitis is very rare and due to that its treatment is unclear. We present a case of glucocorticoid resistant lymphoplasmacytic hypophysitis successfully treated with rituximab.

CASE
A 34-year-old Sri Lankan male, presented with subacute onset severe headache and right sided visual impairment over 2 weeks without fever. He experienced nocturia with polydipsia since late adolescence which worsened with the onset of current symptoms. Later, he developed right sided parotitis. His height was 153 cm, BMI was 22.4 kg/m^2. There was complete vision loss in right visual field and bilateral optic nerve atrophy with more severe involvement on the right. He lacked secondary sexual characteristics. Hormonal evaluation demonstrated secondary hypothyroidism, hypoadrenalism, hypogonadism, low IGF-1, and normal prolactin levels. Osmolality studies confirmed the presence of diabetes insipidus. Brain MRI showed hypoplastic pituitary with contrast enhancing stalk, infiltration in the sellar, suprasellar and parasellar regions with optic nerve and cavernous sinus invasion. Parotid biopsy was normal. Inflammatory markers were elevated. Complete blood count was normal except for mild anemia. Tuberculosis, HIV, Aspergillosis, vasculitis, sarcoidosis and Langerhans Cell Histiocytosis were excluded.

Lymphocytic hypophysitis was presumed and was started on methyl prednisolone pulses with pituitary hormone replacement. Due to poor response and progression of disease, he underwent transsphenoidal biopsy which showed lymphoplasmacytic infiltration with sclerosis suggesting possible IgG4 disease. IgG4 staining was not available. Serum IgG4 levels were normal. Intravenous rituximab pulses (1 g) were given 2 weeks apart

There was marked response to rituximab. His headache settled, nasal desmopressin was tailed off and resulted in slight improvement of the vision of blind eye. Follow-up MRI scans after 5 months revealed no progression from baseline.

CONCLUSION
Rituximab may give promising results in the presence of glucocorticoid resistant lymphoplasmacytic hypophysitis.

PP-PN-07

DIAXOZIDE INDUCED THROMBOCYTOPENIA IN TREATMENT OF INSULINOMA

https://doi.org/10.15605/jafes.037.AFES.120

Xin-yi Ooi, Deviga Lachumanan, Subashini Rajoo, Mohd Badrulnizam Long Bidin
Hospital Kuala Lumpur, Kuala Lumpur, Malaysia

BACKGROUND
Insulinoma is a rare neuroendocrine tumor. Hypoglycaemia due to insulinoma is be managed by diaxozide, a benzothiadiazine derivate with antihypertensive and hyperglycemic activities prior to definitive surgery.

CASE
A 65-year-old female was admitted with hunger pangs, sweating and giddiness after a large carbohydrate meal and weight gain of 14 kg in 2 years. On fasting, she developed symptomatic hypoglycaemia within 2 hours with random blood glucose 2.1 mmol/L, serum insulin 1213 pmol/L (N 17.8-173), C-peptide 7784 pmol/L (N 367-1469) and cortisol 598.5 nmol/L. CT pancreases showed a 5 x 5.1 x 5.3 cm irregular walled lesion with coarse calcifications at the tail of pancreas (HU 13-15) with no septation- likely insulinoma.