From: YADAGIRI, Mahender (SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST)
Sent: 21 November 2018 15:35
To: KINNEY, Fiona (SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST); ADAMS, Jessica (SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST); ASHMAN, Natalie (SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST); LANG, Mike (SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST); BLEASDALE, John (SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST); FOGDEN, Edward (SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST); ANDERSON, Mark (SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST); greenstone.mike@googlemail.com; Walton, Chris (Chris.Walton@hey.nhs.uk)
Cc: RYDER, Bob (SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST)
Subject: FW: WCITD 2019 Abstract Submission Confirmation

Dear All,

Please find the abstract copy submitted to WCITD earlier this week.

Regards,
Mahi

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pe **Abstract Submission**

Novel technologies and gastrointestinal devices for diabetes

Yes

I confirm

on **Oral Presentation**

WCITD19-0068

le **IMPACT OF ENDOBARRIER ON NEED FOR CONTINUOUS-POSITIVE-AIRWAY-PRESSURE VENTILATION (CPAP) IN DIABETES/PRE-DIABE WITH OBSTRUCTIVE SLEEP APNOEA (OSA) STUDY:CURRENT DATA AT ENDOBARRIER REMOVAL AND 6-MONTHS LATER**

s M. Yadagiri[1], F. Kinney[2], J. Adams[3], N. Ashman[3], M. Lang[3], J. Bleasdale[4], E. Fogden[5], M. Anderson[5], M. Greenstone[6], C. Walton[7], B. Ryder[1].
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xt **Background and Aims:**

To assess the extent to which patients with type 2 diabetes or pre-diabetes, obesity (Body Mass Index(BMI) 30-45kg/m²) and moderate OS to discontinue CPAP following weight loss facilitated by the endoscopically-implanted proximal intestinal liner, EndoBarrier.

Methods:

In this ongoing prospective study, we assessed 3-monthly Apnoea Hypopnoea Index (AHI), weight, BMI and HbA1c in 12 patients receiving EndoBarrier treatment. The full study involves EndoBarrier treatment up to 1-year with a further year follow-up.

Results

We report here the data on all 12 patients {9/12(75%) female, 8/12(66%) type 2 diabetes, 4/12(33%) pre-diabetes, mean±SD age 52.6±9.7year EndoBarrier removal (table). The mean±SD weight fell by 10.5±4.0kg from 103.8±14.1 to 93.3±13.8kg (p<0.001), mean BMI by 3.8±1.6kg/m² f 37.4±3.5 to 33.5±3.3kg/m² (p<0.001) and mean HbA1c by 1.4±1.8 %(13.6±17.8mmol/mol) from 7.9±1.7%(62.5±17.4mmol/mol) to 6.6±1.2%(48.8±10.6mmol/mol (p=0.023). During overnight sleep studies to assess impact on OSA, mean AHI fell from 18.8±3.8 to 11.3±4.8 events/hour (p=0.002). Prior to EndoBarrier treatment, all 12 patients had AHI in the National Institute for Health and Care Excellence (NICE moderate sleep-apnoea range (15–29.9 events/hour). During Endobarrier treatment, the AHI of 10/12(83%) patients fell below moderate sle apnoea threshold of 15 events/hour, such that they no longer required CPAP, according to NICE guidelines. At follow-up 6-months after Endobarrier removal, all 6 patients who have so far attended, remained off CPAP with AHI<15 events/hour and also have persisting signifi

improvements in weight, BMI,HbA1c.

Conclusions:

These data demonstrate EndoBarrier's effectiveness in allowing discontinuance of CPAP in moderate OSA, in addition to the previously demonstrated glycaemic and weight benefits.

Endobarrier
obstructive sleep apnoea