



Does obesity lower pain thresholds? - A pilot study.

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Back ground and aims

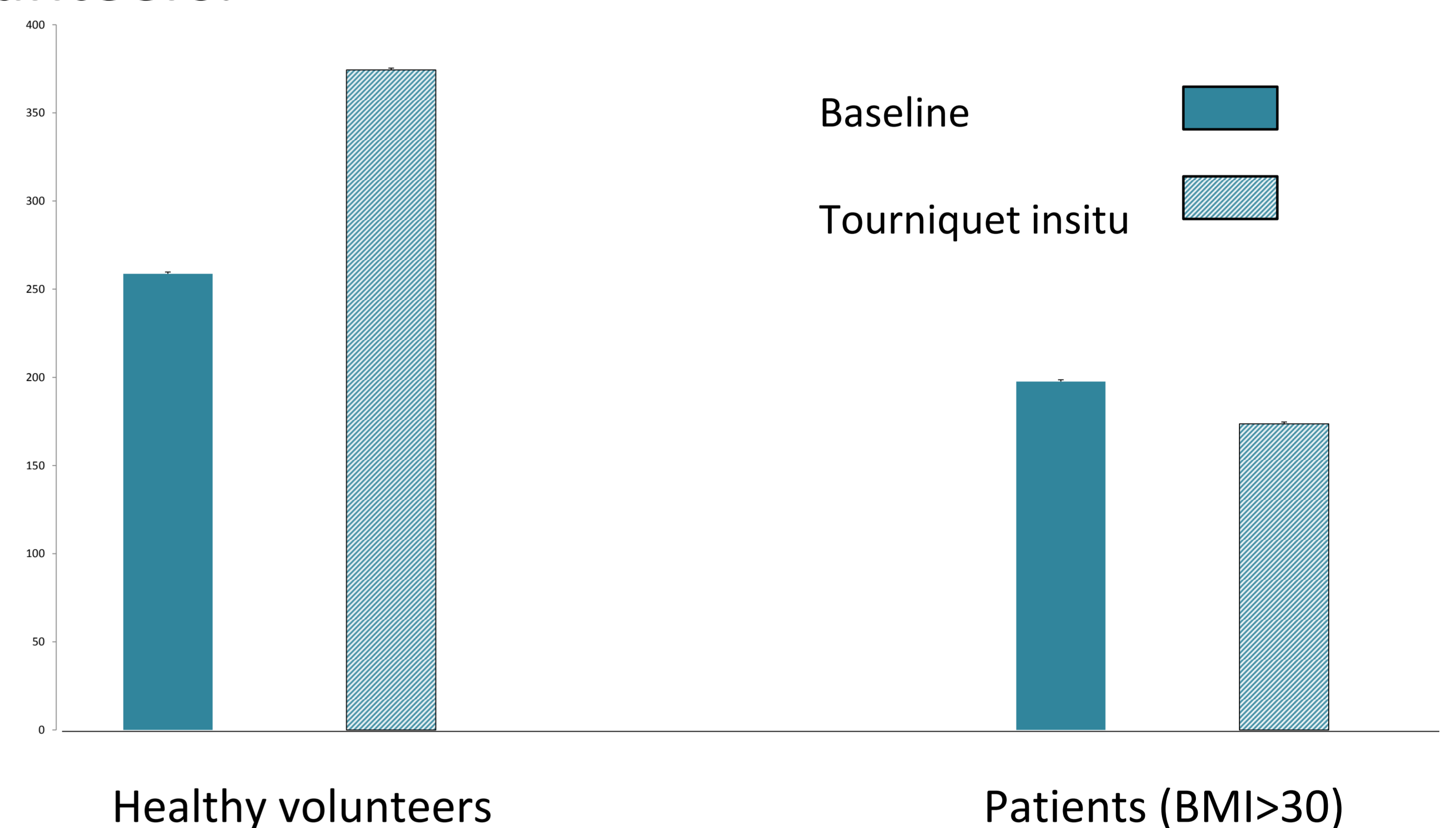
Pain threshold (or perception) can increase or decrease according to some factors like gender, depression or individual differences. Previous studies have shown that pressure pain threshold and conditioned pain modulation can change in obesity but, these studies on the effects of obesity on pain threshold have given controversial results. This pilot study investigates whether there are differences in pain thresholds using quantitative sensory testing in patients with BMI (>30) compared to healthy volunteers.

Methods

Thirteen female patients (BMI >30) and 11 female healthy volunteers (BMI 18-25) were recruited for the study and pressure pain thresholds (PPT), conditioned pain modulation and thermal pain measurements were measured using quantitative sensory testing.

Results

Patients (BMI>30) demonstrated a less efficient CPM as compared to healthy volunteers where an efficient CPM was observed. This was reflected too in the health questionnaires. Thermal measurements found both C and A delta fibre sensation were found to be abnormal in patients (BMI>30) only. No significant difference was noted between PPT's in Patient (BMI<30) or healthy volunteers.



Conclusions

The central sensitisation response particularly 'dynamic responses' in this small group of Patients has not been reported before. The finding of objective physical correlates between patients (BMI>30) and increased pain perception may aid towards better understanding and management of these conditions. Larger and more adequately powered studies are required to investigate the role of dynamic QST in assessing pain response and the value in exploring pain pathways in this select group of patients

