



Binge eating behaviours in obese women with polycystic ovary syndrome

C. Cleave and Y. Jeanes

Health Sciences Research Centre, University of Roehampton, London

Polycystic ovary syndrome (PCOS) is a hormonal disorder with reproductive and metabolic consequences, which affects up to 18 % of women⁽¹⁾. Weight management through lifestyle modification is the first line treatment within guidelines for the management of PCOS⁽²⁾, although the effectiveness of such treatments is limited⁽³⁾. PCOS is often anecdotally associated with binge eating behaviours; however there is a paucity of research. This study aimed to explore binge eating behaviours in obese women with PCOS.

This was a cross-sectional study of eating habits of obese women with PCOS, using self-reported data gathered online. The Bulimic Investigatory Test (Edinburgh) (BITE)⁽⁴⁾ and the Three-Factor Eating Questionnaire (TFEQ-R18v2)⁽⁵⁾ were used to observe eating behaviours, and weight cycling history was screened for. Ethical approval was granted through the procedures of the University of Roehampton.

Completed questionnaire data was analysed from 291 obese women, 86 % of women met the criteria for subclinical eating disorder (BITE score >10) and 36 % for clinical eating disorder (BITE score >25). Hirsutism and/or acne was reported by 97 % of women. More than three quarters of women with PCOS reported disordered emotional and uncontrolled eaters eating behaviours. Logistic regressions highlighted that disordered emotional eating behaviours were predictive factor of binge eating disorder (OR = 13.43; 95 %CI: 4–45.64; $p = .001$). History of weight cycling was also a predictive factor for binge eating disorder (OR = 2.47; 95 %CI: 1.4–4.35; $p = .002$).

Prevalence of binge eating disorder in obese women with PCOS with clinical hyperandrogenism is remarkably high compared to data from obese populations. And weight cycling behaviour association with binge eating disorder in this population highlights the importance of realistic and sustainable weight management interventions. These finding support the need for a multi-disciplinary approach in treating obese women with PCOS and achieving sustained weight loss.

1. March WA, Moore VM, Willson KJ *et al.* (2010) *Hum Reprod* **25**(2), 544–551.
2. Royal College of Obstetricians and Gynaecologists. (2014) Long-term consequences of polycystic ovary syndrome. Green-top Guideline No. 33.
3. Nicholson F, Rolland C, Broom J *et al.* (2010) *Int J Womens Health* **10**(2), 393–9.
4. Henderson M & Freeman C (1987) *Br J Psychiatry* **150**, 18–24.
5. Cappelleri JC, Bushmakin AG, Gerber RA *et al.* (2009) *Int J Obes* **33**(6), 611–620.