

## **Barometric Nervosa**

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#### Abstract

In this article, we conceptualize and critique the condition, barometric nervosa, which we define as "an extreme obsession with measuring one's weight and other anthropometric parameters, leading to ill-health". Barometric nervosa may be related to, but is different from, anorexia nervosa, which is characterized by extremely low body weight, along with either restrictive eating or binge eating, and purging. We suggest that this aspect of psychobarocrinology be addressed as a part of clinical evaluation, and be explored in future research in bariatric medicine.

**Keywords:** Anorexia, obesity, barometric nervosa, egodystonic obesity, orthorexia nervosa.

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#### Introduction

The overlap between psychiatry and endocrinology in disorders of weight homeostasis is well known. Eating disorders such as anorexia nervosa have been described as a metabo-psychiatric syndrome.<sup>1</sup> Psychologic interventions such as intensive behavioural therapy have an important role to play in the management of obesity as well.<sup>2</sup> In this communication, we introduce the concept of barometric nervosa, to invite discussion regarding this aspect of weight management.

### **Definition**

Barometric nervosa (BN) is defined as an extreme obsession with meaning one's weight and other anthropometric parameters, leading to ill-health. BN may occur in persons living with obesity, and in those with eating disorders such as anorexia nervosa. It may affect persons of all ages and gender, but is more likely to be seen in persons engaged in active weight management.

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## **Aetiology**

BN may be a cause, consequence or collateral damage, or a comorbid condition of other weight-related disorders and their management. BN may present as a part of 'egodystonic obesity,'<sup>3</sup> or it may be partly iatrogenic. People living with obesity may develop BN if overtly aggressive measures are taken to reduce weight. People at the other end of the spectrum of the barophenotype, i.e., anorexia nervosa, may also exhibit traits of BN.

#### **Clinical Features**

People with BN will often deny their symptoms, or assume that they are a part of normal behaviour. Repeated measurement of weight and other anthropometric measure; and interest in learning about newer techniques of measuring obesity and adiposity, are hallmarks of BN. Arguments with health care providers about the accuracy of their weighing machines, comparison of weight on different machines, and insistence on recording weight to multiple decimal points are other pointers. Some people with BN check their weight at multiple points during the day, such as before and after using the restroom, taking meals or exercising.

BN is usually associated with orthorexia nervosa,<sup>4</sup> which is defined as an "obsessive focus on dietary practices believed to promote optimum well being through healthy eating (with inflexible dietary rules, recurrent and persistent preoccupations related to food, compulsive behaviours), with "consequent, clinically significant, impairment".<sup>5</sup>

# **Differential Diagnosis**

Frequent measurement of weight does not always mean as BN. Weight monitoring may indicated as part of management of heart failure or kidney disease.<sup>6</sup> It may also be necessary for sportspersons such as wrestlers, weightlifters, judokas and boxers, who compete in weight-defined categories.

### **Diagnostic Criteria**

BN has not been defined as a distinct disease entity so far. However, its diagnosis may be considered if excessive weight measurement, associated with preoccupation about weight management, leads to impairment of personal and professional health. Rumination about weight/ anthropometric measurement, introducing this topic in all conversations and discussions, and focusing on minute numerical changes, which may not be clinically

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or statistically significant, help clinch the diagnosis. There is a need, though, to create validated scales for the screening and diagnosis of BN

### Management

BN is a behavioural disorder, which needs intensive behavioural therapy. Cognitive behavioural therapy (CBT) can be used to wean persons off BN behaviours. Supportive therapy such peer support, coping skills training, and eclectic therapy can be used to manage BN. Care providers such as gymnasium coaches, weight loss coaches and nutritionists can play an important role in prevention and management by explaining the physiological changes in weight during the day, and encouraging an optimal weight monitoring schedule.

# **Prognosis**

We have been encountering an increasing number of people with symptoms of BN (personal experience). These, more often than not, are persons living with obesity who are over-enthusiastic about their treatment, and want rapid results.

The prognosis of BN depends upon the communication style between the bariatric physician and the affected person, the behaviour of his/her peers and friends, and the results of weight loss programmes. A realistic expectation of results of efforts to lose weight is perhaps

the most important contributor to successful resolution of RN

# **Summary**

BN is a "real" condition encountered in bariatric practice. An understanding of its existence, along with its etiopathogenetic factors, is necessary to identify and manage it, as well as prevent it.

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