

Psychological Factors in Nutritional Disorders of the Elderly: Part of the Spectrum of Eating Disorders

David M. Clarke,* Mark L. Wahlqvist, Con R. Rassias, and Boyd J. G. Strauss

Monash Medical Centre, Melbourne, Australia

Accepted 15 January 1998

Abstract: Objective: *To illustrate common psychogenic factors involved in undereating and undernutrition in the elderly.* **Method:** *Two cases are described.* **Results:** *In the context of age-related physical and social factors, obsessional, phobic, and hypochondriacal anxieties can lead to significant food restrictions and undernutrition.* **Discussion:** *Psychogenic factors need to be considered in undernutrition of the elderly and the phenomena considered in the spectrum of eating disorders.* © 1999 by John Wiley & Sons, Inc. *Int J Eat Disord* 25: 345–348, 1999.

Key words: *psychogenic factors; elderly; undernutrition*

INTRODUCTION

Reduced appetite and undernutrition occur commonly in the elderly and not necessarily in the presence of overt physical disease (Agarwal, Acevedo, Cayten, & Pitchumoni, 1986). The etiology involves a range of physical and social changes occurring in old age (Morley, Silver, Miller, & Rubenstein, 1989). The literature regarding psychological contributions to undernutrition and starvation in the elderly is largely restricted to discussions of the effect of depression and dementia on appetite (Sandman, Adolfsson, Nygren, Hallmans, & Winblad, 1987; Koenig, Cohen, Blazer, Krishnan, & Silbert, 1993) and to descriptions of unusual cases of anorexia nervosa (Hsu & Zimmer, 1988). This is a narrow perspective. We believe psychological factors are common in nutritional disorders in the elderly and present two cases to illustrate this. Each was admitted to an acute general hospital with serious weight loss and malnourishment. The cases are discussed in a traditional biopsychosocial framework. Laboratory investigations are given in Table 1.

*Correspondence to: Dr. D. M. Clarke, Department of Psychological Medicine, Monash Medical Centre, 246 Clayton Road, Clayton, Victoria 3168, Australia.

Table 1. Measures of nutritional status for patients at time of initial assessment

Measure (Reference Range)	Case A	Case B
Age	73	82
Weight (kg)	32.2	41.0
Body mass index (kg/m ²)	14.8	14.9
Mid arm circumference (cm)	17.5	18.5
Fat mass (kg) (20–30%) ^a	5.0 (15.6%)	8.9 (21.7%)
Fat-free mass (kg)	27.2	32.1
Serum albumin (35–45 g/L)	34	37
Lymphocyte count (1.00–4.00 × 10 ⁹ /L)	0.87	0.43
25-OH vitamin D (28–165 nmol/L, summer value)	26	—
Bone mineral density-total body (g/cm ²)	0.413 g/cm ²	—
Age matched SD score	-2.38	—

^aFat mass was calculated from four skinfold thicknesses using the formula of Durmin and Wormersley (1974).

CASE A

Mrs. A, a 73-year-old woman with no significant past medical history, presented with a weight of 31.5 kg and a 2-year history of reduced appetite, loose stools, progressive weight loss, tiredness, and fatigue. The loose stool was exacerbated by milk, eggs, and fatty foods which she was now avoiding. Extensive investigation, including endoscopy, found no pathology. Of note in her personal history was deprivation, being born into a poor family, and being given up to an orphanage for care at an early age. She had had a long marriage marked by feelings of dependency and closeness, together with verbal abuse, ambivalence, and chronic dissatisfaction. There was no history of depressed mood, body image disturbance, or deliberate attempts to lose weight. Instead, she described a gradual narrowing of the range of foods ingested as she connected them to an array of functional somatic symptoms. There was no evidence of psychosis or dementia. On admission to hospital, her body mass index (BMI) was 14.5 kg/m². The formulation was that, upon a background of early deprivation, Mrs. A developed ambivalent dependency and chronic dissatisfaction in her relationship, coupled with increasing anxiety and somatic preoccupation. Over time, this developed into an obsessional attention to food and a narrowing of dietary repertoire. As well as nutritional support, the main intervention was a behaviorally oriented supervision of her eating by a clinical psychologist aimed at reducing her anxious concerns about food. This was commenced in the hospital and continued after discharge. Over a relatively brief time, she began eating regularly, with increased repertoire and concomitant weight gain. She resumed regular exercise, but did not wish to pursue issues of her marriage in counselling.

CASE B

Mrs. B was an 82-year-old widow admitted with a short history of mouth ulcers, loss of appetite, generalized weakness, reduced mobility, and a weight of 41 kg. She had been living in supported accommodation for 14 years following the diagnosis and treatment of cervical cancer. Since that time she had been troubled by fecal incontinence, attributed to radiation proctitis. The incontinence was a cause of great embarrassment. It was associated with certain foods which she came to "dread the sight of." Her oral intake reduced further over the final few months as a result of mouth ulcers. Mrs. B had recently lost a

son and a daughter-in-law. On admission, she was emaciated with a BMI of 14.8 kg/m², aphthous ulcers, and chelitis. There was no evidence of occult malignancy or gastrointestinal disease on examination and investigation. It was postulated that her malnutrition had developed gradually, beginning with her awkwardness about her incontinence, leading to a narrowing of diet and probable vitamin deficiency. The resulting chelitis led to further food restriction. Mrs. B was an obsessional lady who had developed marked anxiety and phobia about food and her own physical state. There were not obvious depressive features and, although loss is associated with anorexia in the elderly (Russell & Gilbert, 1992), Mrs. B did not believe that the deaths in her family were significant. Management involved treating the chelitis with steroid/antibiotic ointment and providing a protein, glucose, and vitamin-supplemented diet. Brief psychotherapy was restricted to reassurance and education about her diet. A female nurse was asked to talk to her about matters of personal hygiene. At follow-up after 3 months, she had put on a small amount of weight and had returned to her previous level of health and functioning.

DISCUSSION

We present here two cases of very severe nutritional disturbance—yet cases that are not unusual. Case A is remarkable for its seemingly trivial cause—an obsessional preoccupation with healthy eating and a gradual narrowing of repertoire. Case B demonstrates a “vicious cycle” with initial somatic concern, obsessionalism, and phobic avoidance of food, followed by the development of chelitis and further reduction in intake. Both patients demonstrated anxious and obsessional preoccupation with food and somatic symptoms, features commonly seen in patients with anorexia nervosa (Thornton & Russell, 1997). This may reflect, in part, social values about food. Miller, Morley, Rubenstein, and Pietruszka (1991) have demonstrated the presence of inappropriate attitudes to eating and self-control around food, similar to that seen in anorexia nervosa, in up to 50% of undernourished elderly men. It may be that the appropriate health and diet concern of adult life, associated as it usually is with food restriction, becomes a vulnerability in later life. In addition, both patients had significant interpersonal issues but demonstrated a relative inability to talk about emotional aspects of their life (alexithymia), a characteristic associated with somatic concern (Lolas, 1989) and anorexia nervosa (Bourke, Taylor, Parker, & Bagby, 1992). Of further interest is the early emotional deprivation of Case A, a feature described in somatizing patients in general (Salmon & Calderbank, 1996) and patients with anorexia nervosa in particular (O’Kearney, 1996).

The literature contains a number of reports of anorexia nervosa presenting for the first time in the elderly (Hsu & Zimmer, 1988; Hall & Driscoll, 1993) and cases of relapse of anorexia nervosa in the elderly (Gowers & Crisp, 1990). However, such cases are not common.

On the other hand, malnutrition is common in the elderly, with an estimated prevalence between 17% and 65% of elderly medical inpatients (Agarwal et al., 1986) and more than 50% of elderly citizens in long-term facilities (Pinchofsky-Devin & Kaminski, 1986). It is also associated with substantial mortality (Ryan, Bryant, Eleazer, Rhodes, & Guest, 1995). The literature identifies many physical and social factors associated with old age that make the elderly person nutritionally vulnerable. These include social isolation, relative poverty, reduced mobility, decreased gastrointestinal reserve, and impaired taste sensation (Clark, Wahlqvist, & Strauss, 1998). These all mean that there is less physical reserve. Psychiatric factors such as dementia or depression lead to further reduced intake and

impairment of self-care. However, we believe that psychological factors are much broader and much more common than this.

The cases presented here illustrate how common psychological factors contribute significantly to undernutrition and interact with the physical and social factors. Anorexia of the elderly may show some features of anorexia nervosa, particularly the attitudes to food and eating, obsessionality, and alexithymia. In addition, we have observed significant anxiety, particularly phobic, obsessional, and somatic. To be adequately addressed clinically, the psychological influences need to be recognized and managed together with the physical and social problems in a truly biopsychosocial way. It may be useful to consider anorexia of the elderly as part of the spectrum of eating disorders. Psychosocial aspects of management include dietary advice for elderly people, carers, and health workers in order to correct eating and food attitude and to bring attention to the multifactorial nature of the problem. As illustrated in these cases, simple psychological and behavioral interventions are also useful.

REFERENCES

- Agarwal, N., Acevedo, F., Cayten, C.G., & Pitchumoni, C.S. (1986). Nutritional status of the hospitalized very elderly from nursing homes and private homes [abstract]. *American Journal of Clinical Nutrition*, 43, 659.
- Bourke, M.P., Taylor, G.J., Parker, J.D.A., & Bagby, R.M. (1992). Alexithymia in women with anorexia nervosa: A preliminary investigation. *British Journal of Psychiatry*, 161, 240-243.
- Clarke, D.M., Walhqvist, M.L., & Strauss, B.J.G. (1998). Undereating and undernutrition in old age: integrating bio-psychosocial aspects. *Age and Ageing*, 27, 527-534.
- Durnin, J.V.G.A., & Wormersley, J. (1974). Body fat assessed from total body density and its estimation from skinfold thickness: Measurements on 481 men and women aged between 16-72 years. *British Journal of Nutrition*, 32, 77-97.
- Gowers, S.G., & Crisp, A.H. (1990). Anorexia nervosa in an 80 year old woman. *British Journal of Psychiatry*, 157, 754-757.
- Hall, P., & Driscoll, R. (1993). Anorexia in the elderly: An annotation. *International Journal of Eating Disorders*, 14, 497-499.
- Hsu, L.K.G., & Zimmer, B. (1988). Eating disorders in old age. *International Journal of Eating Disorders*, 7, 133-138.
- Koenig, H.G., Cohen, H.J., Blazer, D.G., Krishnan, K.R.R., & Silbert, T.E. (1993). Profiles of depressive symptoms in younger and older medical inpatients with major depression. *Journal of the American Geriatrics Society*, 41, 1169-1176.
- Lolas, F. (1989). Communication of emotional meaning, alexithymia, and somatoform disorders: A proposal for a diagnostic axis. *Psychotherapy and Psychosomatics*, 52, 214-219.
- Miller, D.K., Morley, J.E., Rubenstein, L.Z., & Pietruszka, F.M. (1991). Abnormal eating attitudes and body image in older undernourished individuals. *Journal of the American Geriatrics Society*, 39, 462-466.
- Morley, J.E., Silver, A.J., Miller, D.K., & Rubenstein, L.Z. (1989). The anorexia of the elderly. *Annals of the New York Academy of Science*, 575, 50-58.
- O'Kearney, R. (1996). Attachment disruption in anorexia nervosa and bulimia nervosa: A review of theory and empirical research. *International Journal of Eating Disorders*, 20, 115-127.
- Pinchofsky-Devin, G.D., & Kaminski, M.V. (1986). Correlation of pressure sores and nutritional status. *Journal of the American Geriatrics Society*, 34, 435-440.
- Russell, J., & Gilbert, M. (1992). Is tardive anorexia a discrete diagnostic entity? *Australian and New Zealand Journal of Psychiatry*, 26, 429-435.
- Ryan, C., Bryant, E., Eleazer, P., Rhodes, A., & Guest, K. (1995). Unintentional weight loss in long-term care: Predictor of mortality in the elderly. *Southern Medical Journal*, 88, 721-724.
- Salmon, P., & Calderbank, S. (1996). The relationship of childhood physical and sexual abuse and adult illness behaviour. *Journal of Psychosomatic Research*, 40, 329-336.
- Sandman, P.O., Adolfsson, R., Nygren, C., Hallmans, G., & Winblad, B. (1987). Nutritional status and dietary intake in institutionalized patients with Alzheimer's disease and multiinfarct dementia. *Journal of the American Geriatrics Society*, 35, 31-38.
- Thornton, C., & Russell, J. (1997). Obsessive compulsive comorbidity in the dieting disorders. *International Journal of Eating Disorders*, 21, 83-87.