

behavioural change rather than vice versa. In other words, once the patient began to get her bingeing and vomiting under control she felt better, her self esteem increased, and her distorted view of herself and her relationship to food began to alter.

It may be that more intensive approaches such as those suggested by Fairburn, whose patients were seen two or three times a week for the first three weeks,<sup>8</sup> and Lacey, whose patients were seen for half a day a week,<sup>9</sup> have an advantage. Such intensive treatment, however, is not often possible in an NHS setting and from our results it may not be cost effective. Most of our patients (71; 77%) were neither bingeing nor vomiting at the end of treatment, a success rate comparable with those reported by Fairburn (81%) and Lacey (80%). Possibly our dropout rate would have been less had we seen people more intensively in the initial stages of treatment.

From the therapists' point of view group therapy was the least satisfactory. The dropout rate was highest (37%) and there was a tendency for the overall improvement to be less. Patients expressed more dissatisfaction with this treatment. Nevertheless, it still proved remarkably effective for those who continued with it, and clearly it is the most cost effective approach to the disorder.

The other main treatment of bulimia nervosa has been with antidepressants. Imipramine, phenelzine, and desipramine have all been found superior to placebo in double blind controlled trials.<sup>20-22</sup> There have also been several open studies on newer antidepressants. All these studies have been short term without follow up, and many have not controlled for patients with severe depressive disorder who have bulimia as a symptom. It is not clear from these drug trials whether antidepressants are having a primarily antibulimic, antidepressant, or antianxiety role. What is clear is that the magnitude of change that occurs with drugs is smaller than with psychotherapy. Patients may show a 50-70% reduction in their bulimic behaviour at the end of treatment, but this means that many are still bingeing and vomiting at quite high rates. What little evidence there is therefore suggests that psychotherapy for bulimia produces greater magnitude of change, a wider range of changes across target behaviours, and more stability in terms of maintenance of any change that occurs.

Our patients showed much lower rates of other impulse related behaviours than some reported studies. Only a small proportion had engaged in shoplifting, street drug use, self mutilating behaviour, or attempted suicide. Their mean weekly alcohol consumption was exactly as reported in other surveys of Scottish women.<sup>23</sup> The reasons are not clear but may be due to differences in referral patterns among centres. We are the only clearly defined treatment centre in the south east of Scotland, and most of our patients were first or direct referrals. The higher rates reported elsewhere may be due to an overrepresentation of such multi-impulsive patients being referred to specialist units.

The study highlights one or two other methodological issues. It is essential to define patients in terms of all the available diagnostic criteria for bulimia and bulimia nervosa. The looseness of DSM-III criteria means that it is no longer tenable simply to state that patients meet these criteria. It is also important in such studies to ensure that all patients who are randomised are included in the analysis. Nearly all other studies of both psychotherapy and drug treatment have excluded dropouts from their analyses, which clearly biases results in favour of finding a definite treatment effect.

We conclude that bulimia nervosa is amenable to treatment by structured once weekly psychotherapy in either individual or group form. With such treatments, provided that patients complete the course roughly three quarters will be symptom free at the end of 15 weeks.

We thank Helen Talbot, of CAST, University of Edinburgh. This research was supported by the Wellcome Trust (grant No 12055/15) and the Nineveh Trust.

## References

- Russell G. Bulimia nervosa; an ominous variant of anorexia nervosa. *Psychol Med* 1979;9:429-48.
- Pyle RL, Mitchell JE, Eckert ED. Bulimia: a report of 34 cases. *J Clin Psychiatry* 1981;42:60-4.
- Cooper PJ, Fairburn CG. The depressive symptoms of bulimia nervosa. *Br J Psychiatry* 1986;148:268-74.

- Viesselman JO, Roig M. Depression and suicidality in eating disorders. *J Clin Psychiatry* 1985;46:118-24.
- Szyrinski V. Anorexia nervosa and psychotherapy. *Am J Psychol* 1973;7:492-555.
- Garfinkel PE, Moldofsky H, Garner DM. The heterogeneity of anorexia nervosa: bulimia as a distinct subgroup. *Arch Gen Psychiatry* 1980;37:1036-40.
- Grace PS, Jacobson RS, Fullager CJ. A pilot comparison of purging and non-purging bulimics. *J Clin Psychol* 1985;41:173-80.
- Fairburn CG. A cognitive-behavioural approach to the management of bulimia. *Psychol Med* 1981;11:707-11.
- Lacey JH. Bulimia nervosa: binge eating and psychogenic vomiting; a controlled treatment study and long term outcome. *Br Med J* 1983;286:1609-13.
- American Psychiatric Association. *DSM-III. Diagnostic and statistical manual of mental disorders, third edition*. Washington, DC: APA, 1980.
- American Psychiatric Association. *DSM-III-R. Diagnostic and statistical manual of mental disorders, third edition, revised*. Washington, DC: APA, 1987.
- Fairburn CG, Garner DM. The diagnosis of bulimia nervosa. *International Journal of Eating Disorders* 1986;5:403-9.
- Fairburn CG. Bulimia: its epidemiology and management. In: Stunkard AJ, Steller E, eds. *Eating and its disorders*. New York: Rowen Press, 1984.
- Pocock ST. *Clinical trials: a practical approach*. Chichester: Wiley and Sons, 1983.
- Montgomery SA, Asberg M. A new depression scale designed to be sensitive to change. *Br J Psychiatry* 1979;134:382-9.
- Geigy Pharmaceuticals. *Scientific tables*. 6th ed. Macclesfield: Geigy, 1962:623.
- Yates AJ, Sambraio F. A descriptive and therapeutic study. *Behav Res Ther* 1984;22:503-17.
- Lee NF, Rush AJ. Cognitive-behavioural group therapy for bulimia. *International Journal of Eating Disorders* 1986;5:599-615.
- Wilson GT, Rossiter E, Kleifield EI, Lindholm L. Treatment of bulimia nervosa; a controlled evaluation. *Behav Res Ther* 1986;24:277-88.
- Pope HG, Hudson JL, Jonas JM, Yurgelun-Todd D. Bulimia treated with imipramine: a placebo-controlled, double-blind study. *Am J Psychiatry* 1983;140:554-8.
- Walsh BT, Stewart JW, Roose SP, Glodis M, Glassman AH. A double-blind trial of phenelzine in bulimia. *J Psychiatry Res* 1985;19:485-9.
- Hughes PL, Wells LA, Cunningham CJ, Ilstrup DM. Treating bulimia with desipramine. *Arch Gen Psychiatry* 1986;43:182-6.
- Crawford A, Plant MA, Kreitman N, Latham RW. Self reported alcohol consumption and adverse consequences of drinking in three areas of Britain: general population studies. *Br J Addict* 1985;80:421-8.
- Henderson M, Freeman CPL. The BITE: a self-rating scale for bulimia. *Br J Psychiatry* 1987;150:18-24.
- Garner DM, Olmsted MP, Bohr Y, Garfinkel PE. The eating attitude test: psychometric features and clinical correlates. *Psychol Med* 1982;12:871-8.
- Garner DM, Olmsted MP, Polivy J. The development and validation of a multi-dimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders* 1983;2:15-24.
- Rosenberg M. The measurement of self. In: *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press, 1965.
- Snaith RP, Constantopoulos AH, Jardine MY, McGuffin P. A clinical scale for the self-assessment of irritability. *Br J Psychiatry* 1978;132:164-71.

(Accepted 25 November 1987)

---

## ONE HUNDRED YEARS AGO

Admiral Inglefield, reporting on the Lady Strangford Hospital, which has now been in working order for some months, and has been of great service to many sufferers landed from steamers passing through the Suez Canal, points out that, judging from the number already received, more than 200 patients may be expected in a year; and of these, many are likely to be serious cases, chiefly sailors. Last month, 60·8 per cent. of the beds were filled. There have been seven deaths, and fifty-three patients have been discharged cured. Not only from the ordinary steamers, but also from Her Majesty's Indian troopships and other vessels of the Royal Navy, have sick been sent to the hospital. The committee have still to make up a deficiency of £1,700, and £500 more will be needed to build a separate ward for isolated cases. So many persons are interested, directly or indirectly, in those who pass through the Canal, or many have friends in India, China, or Australia and New Zealand, and not a few are concerned in Egypt, the Canal, or in ships that pass through, that the committee do not hesitate to make this appeal, in hopes that the £2,200 still required for the building fund will be supplied speedily and willingly.

(*British Medical Journal* 1888;i:9)

---

## Correction

### Antigen detection in primary HIV infection

We regret that two editorial errors occurred in this paper by Dr M von Sydow and others (23 January, p 238). The heading for table II should have read, "Time course of appearance of different serological markers of infection with HIV in a patient with primary symptomatic infection." Also, in the third paragraph of the discussion Mathiesen was twice incorrectly spelt Mathieson.