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Paper

Bloodletting, Bulimia Nervosa and Borderline Personality Disorder

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Some recent case-reports in the psychiatric literature have presented patients who bloodlet and suggested that theirs is a rare pathological behaviour which is part of the purgative psychopathology associated with bulimia nervosa. Other reports have construed bloodletting as a self-mutilative behaviour and indicative of severe personality disorder. We review the literature to ascertain whether it supports either of the above claims or whether there are patients who conform to both or neither stereotype. We present two further cases, which highlight the importance of (1) eliciting Axis I and Axis II psychopathology in the assessment of all patients and (2) eliciting the patient's view of the motivation and meaning of the behaviour. There is strong evidence to suggest that bloodletting is not solely a feature of eating disorders and that it may be more generally related to personality disorder, where, even in the absence of Axis-I pathology, it may be an indicator of severity of psychopathology. *© 1998 John Wiley & Sons, Ltd and Eating Disorders Association.*

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INTRODUCTION

Bloodletting refers to the practice of letting one's own blood 'by venepuncture or the insertion of intravenous cannulae' (Parkin and Eagles, 1993). There are no studies of its prevalence and it would appear to be a rare behaviour (Vandereycken, 1993; Victor, 1972). Cases have been reported in connection with eating disorders, particularly bulimia nervosa, and borderline personality disorder.

Bloodletting is documented most thoroughly in the French psychiatric literature in connection with a specific syndrome named 'L'asthénie de Ferjol'

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(Bernard *et al.*, 1967; Bernard, 1969, 1982). This syndrome derives its name from the French fiction literature in which the heroine kills herself slowly by withdrawing blood from her chest with needles (Bernard, 1982). L'asthénie de Ferjol comprises three elements: anaemia, self-induced haemorrhaging and pathological personality and is documented in detail for 12 cases by Bernard (1969).

It has been proposed that bulimia-associated behaviours are analogous to the medical practice of therapeutic bloodletting, common in 19th century (Cosman, 1986; Siddall, 1980; Kira, 1987). Indeed, therapeutic bloodletting may even have been used as a treatment for bulimia-like problems (Parry-Jones and Parry Jones, 1991). In this way, bloodletting is seen to serve an anxiety-relieving purgative function, similar to laxative misuse, which is directly related to bulimia nervosa.

More recently, a specific link between bloodletting and bulimia nervosa was suggested by three further cases (Parkin and Eagles, 1993). However, this conclusion has been questioned on the grounds that features of the cases such as other self-harmful behaviours warrant the diagnosis of an underlying (borderline) personality disorder (DMS-III-R, APA, 1987; Szabo, 1993).

Furthermore, Szabo suggests that in cases of dual diagnosis of borderline personality disorder and eating disorder, which is common (Koepp *et al.*, 1993; Skodol *et al.*, 1993; Wonderlich and Mitchell, 1992), the overall severity of psychopathology is increased (Dolan *et al.*, 1995). It may be more helpful, therefore to be alerted to the possibility of more severe psychopathology as indicated by the discovery of a patient's bloodletting behaviour.

The role of borderline personality organization (Kernberg, 1984) in the development of self-mutilating behaviour has been discussed with reference to a case of bloodletting, and self-loathing, guilt and self-reproach were viewed as of pivotal importance (Margo and Newman, 1989).

Self-induced phlebotomy resulting in anaemia is also described by Victor (1972), whose patient was repeatedly referred to a haematology service for anaemia that was sufficiently severe for her to require blood transfusions. Associations with hysteria, sociopathy and Munchausen's Syndrome are also considered.

Whilst there are many published examples of bloodletting associated with eating disorder and fewer with personality disorder alone, few authors have attempted to assess the presence of underlying personality disorder in their cases. We would suggest that the conclusion that there is a direct and exclusive relationship between bulimia and bloodletting behaviour is, therefore, premature.

We present two women patients with severe personality disorder, associated eating disturbance, severe self-harming behaviour and bloodletting. Names and some details have been changed to protect the identities of these women.

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CASE HISTORY 1

Ms A was aged 28 years when she was admitted for specialist treatment of her personality difficulties. Her early childhood involved a series of medical treatments and surgery for kidney problems. She had had experience of injecting herself previously. Her mother had suffered from depression and Ms A described herself as not being close to either of her parents and was rivalrous with her two younger sisters. Academically, she achieved well, although she hated school and her education was interrupted on account of her self-destructive behaviours.

On psychological testing during her treatment, using the self-report Personality Diagnostic Questionnaire (PDQ-4) (Hyler *et al.*, 1987; personal communication, 1995) Ms A scored positively for a total of seven personality disorders, including: histrionic, narcissistic, borderline, obsessive compulsive, paranoid, and dependent personality disorder.

Ms A's self-destructive behaviours were the main reason for her referral. She had a long history of suicide attempts and self-destructive behaviour, which had begun at age 12 years. These self-destructive acts consisted mainly of overdoses of painkillers, beginning with 'minor' overdoses and progressing to 'serious' overdoses at age 15 years, which led to her first admission to general hospital. Later her overdosing resulted in compulsory treatment in intensive psychiatric care. Other self-harmful behaviours included cutting and burning her wrists with cigarettes and abusing her medication. Prior to admission, she had 'drawn out blood with injections' several times a day. She described these behaviours as one way of finding out whether she was 'real', saying that none of them were attempts to kill herself.

In the past, Ms A had also had bulimia nervosa. During her treatment she continued to have difficulties with eating and food, alternately starving and binge-eating. This was construed by her as self-destructive behaviour and it was combined with misuse of medication to control her medical condition. Ms A also took two overdoses of paracetamol whilst in treatment. In addition to this range of self-destructive acts, she talked of withdrawing her own blood as resulting in a feeling of relief. She compared it to cutting herself, saying that it was a way of concealing cutting herself since the only evidence was tiny pin-pricks rather than the usual cuts.

CASE HISTORY 2

Ms B was a 24-year-old whose principal difficulties on referral for personality disorder treatment were described as severe personality disorder with neurotic expression, high anxiety and substance misuse. Her referring psychiatrist also described her as displaying a very strong compulsion to self-harm.

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Ms B had experienced a deprived childhood. Her biological father died when she was very young and she felt she had no relationship with her stepfather. Her mother had received both inpatient and outpatient psychiatric treatment for depression and anxiety. Ms B felt that her mother paid more attention to her younger brother and sister than to herself. Both parents were alcoholic and physically violent towards each other. Her stepfather physically and sexually abused her in adolescence. Ms B's brother had been imprisoned for burglary and drug-related offences and had killed animals. He had also been physically abusive towards her. She was first placed in care at the age of 7 years and subsequently attended various care homes, from which she regularly absconded. Ms B had poor relationships at school, truanting and sniffing solvents.

Following her early contact with care services she had frequent contact with both the health service and the criminal justice system, spending extensive periods in institutional settings including being detained in a secure psychiatric unit for over a year. During her psychiatric history she had presented with depressive symptoms, had binge eaten, and starved herself to the extent that she required hospitalization. However, her disordered eating behaviour had been viewed by her referrer as a manifestation of her personality disorder and, in spite of treatment for it during several psychiatric hospital admissions, she had never been diagnosed as having an eating disorder.

Ms B's solvent drug abuse began at the age of 10 years. This included cannabis and LSD abuse combined with continual abuse of alcohol and sedative medication, she later began to drink surgical spirit. Using a used syringe, she injected paint-stripper subcutaneously which almost resulted in the loss of the use of one hand and required surgical intervention. Other self-harmful behaviours included cutting her forearms, which were, in the words of her referrer, 'criss-crossed with scars', taking overdoses and burning herself with an iron.

Ms B met diagnostic criteria for seven DMS-III-R Axis-II personality disorders, as measured by the Personality Diagnostic Questionnaire (PDQ-R, Hyler *et al.*, 1987). In addition to meeting PDQ-R criteria for borderline personality disorder she scored in the clinical range on the Borderline Syndrome Index (Conte *et al.*, 1980), scoring 34 out of a possible 52, which indicates severely borderline psychopathology. Although Ms B continued to restrict her food intake, her score of 10 on the self-report Eating Attitude Test (EAT-26, Garner *et al.*, 1982; Garner and Garfinkel, 1979) was within a normal range, well below the clinical threshold of 20 points. She did not have a morbid fear of fatness and weighed 54.1 kg (8 stones, 7 lb) and was 1.69 m (5'6") tall.

During her specialist inpatient psychotherapy Ms B displayed occasional binge eating. She sometimes self-harmed by drinking bleach. She bloodlet on at least three occasions. This was usually by using a used needle and syringe. The quantity of blood removed was small and she did not require admission to medical facilities, on account of it, on any occasion. There is no record of her becoming anaemic at any time during this period. Ms B herself regarded the

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bloodletting as a self-harmful act, reporting it as such on a self-report questionnaire. She explained that bloodletting rid her of the badness she had inherited from her family.

DISCUSSION

Previously, bloodletting has been considered a feature of eating disordered behaviour, an indication of personality disorder, particularly severe borderline personality disorder, and a rare form of self-mutilation. Whilst few reports incorporate an adequate assessment of both eating disorder symptoms and personality features, this information is available in the cases of Ms A and Ms B. Both these personality disordered women showed severely disordered eating behaviours which did not meet diagnostic criteria for bulimia or anorexia but were associated, during the period of study, with their personality difficulties. In both cases, the clinical and self-report assessments indicated severe personality disorder. In keeping with previous reports, both women demonstrated a wide variety of self-destructive behaviours. This range included binge-eating, which is a diagnostic feature of borderline personality disorder.

A strong association is conveyed in the literature between bloodletting and eating disorder, particularly bulimia nervosa, by several case reports, an historical resonance with early therapeutic bloodletting and a purgative effect of the behaviour. However, the possibility of dual diagnosis of personality disorder to which such behaviour may also relate, is an important consideration. The comorbidity of eating disorder and personality disorder is common (Skodol *et al.*, 1993; Wonderlich and Mitchell, 1992) and tends to increase with the overall severity of psychopathology (Dolan *et al.*, 1995). Bloodletting may be considered no more than a non-specific indicator of severity suggesting underlying personality disorder. Both Ms A and Ms B construed their bloodletting primarily as an aspect of their self-destructive behaviour and neither stated any relationship between bloodletting and their abnormal eating attitudes or associated problems.

It has been argued that bloodletting, because of an association with a stated desire for weight control, is a form of purgation in the same way as are vomiting and laxative abuse. In most of the reported cases, despite the coincidence of bloodletting and eating disorder symptoms there seems to be no direct relationship between the bloodletting and concern with weight loss, nor with body image disturbance. The wish to lose weight by bloodletting has only been explicitly reported in one case. Cosman (1986) suggests that there may be more to purging behaviour than the desire to be thinner and the same would seem to apply with bloodletting.

Much self-mutilation can be viewed as serving a purgative function. The similarity between bloodletting and self-mutilation suggests a further

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caution to inferring a specific association with eating disturbance. Parkin and Eagles' (1993) patients' explanations of their bloodletting closely resemble those given by people to explain self-mutilation (Gardner and Gardner, 1975) and histories of other self-harmful behaviours were prominent in the case reports.

Both self-mutilation and binge-eating are diagnostic criteria for borderline personality disorder. Many patients in these reports, including Ms A and Ms B, had binge-eating difficulties but were not diagnosed as suffering from eating disorder whilst they were bloodletting. The similarity of bloodletting to self-mutilation, documentation of cases in which no eating disorder is noted and the high comorbidity of eating disorder and personality disorder (Skodol *et al.*, 1993; Wonderlich and Mitchell, 1992) strengthens the suggestion that bloodletting may be related more closely to personality disorder than eating disorder.

However, caution should be exercised in trying to make exclusive associations with any disorder. Several diagnoses, including Loloum *et al.* (1985) found their self-bloodletting patient to have a psychotic personality structure. It may be more useful to construe bloodletting as self-mutilative behaviour, which is consistent with many psychiatric disorders but may also be particularly indicative of severe personality disorder. Since the comorbidity of personality disorder and other disorders has been shown to have negative implications for prognosis, that an assessment of personality disorder should always be made, is a clear clinical implication.

The meaning of bloodletting for each individual also has particular importance for establishing its diagnostic significance, as may the patient's expressed intentions in carrying out bloodletting behaviour. For example, Ms A's motivation varied between testing whether she was real and relieving tension, reflecting the importance of establishing this for each patient. It is simplistic to imagine that a complex behaviour such as self-bloodletting is likely always to have a single cause or one which carries diagnostic significance.

Bloodletting may be the self-harm of choice where it is facilitated by experience in the use of, or easy access to, the requisite equipment since such ready access is common to almost all the reported cases. There may also be a 'sub-cultural' element to particular individual's selection of bloodletting behaviour. In the cases reported by Parkin and Eagles (1993), Brown (1993) and Victor (1972) the study of veterinary science, medicine or nursing may have facilitated the selection of this behaviour. Indeed, Bernard (1969), in his original description of 'Lasthénie de Ferjol', stated that it was exclusive to young women who worked in professions allied to medicine. For Ms A and Ms B, each had the experience and opportunity to obtain the means to bloodlet albeit these were different.

It is most striking that almost all of the reported cases are of women, aged between 20 and 40 years. Bernard (1969) makes reference to one male case but suggests that the motivation for such behaviour is likely to be different in men,

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the latter being more likely to let blood specifically to achieve a particular goal, such as removal from custody to hospital. The greater likelihood that women will seek psychiatric help for their problems may in part explain this apparent gender bias. Bloodletting may also, therefore, be present, yet undisclosed in men of a similar age. Additionally, the disorders with which bloodletting has so far been associated, eating disorders and borderline personality disorder, are more prevalent in women (Vandereycken and Van de Broucke, 1984; Hall *et al.*, 1985; APA, 1995). Self-mutilative behaviour is also more commonly reported by women (Favazza, 1987). Furthermore, bloodletting seems from at least some of these case reports to be associated with self-punishment, guilt and self-reproach.

Conclusions

Self-bloodletting behaviour appears to be rare but has occurred in the context of various psychiatric disorders, most commonly eating disorder and personality disorder. It is unclear, but certainly possible, that diagnosis in many of the eating disordered subjects may actually have been dual. Self-bloodletting is an unusual behaviour requiring planning and some skill in its execution. It is, in this way, a complex behaviour and, as such, is the product of a range of thoughts and related affects. In requiring at least some level of conscious motivation, self-bloodletting may sometimes be the result of the characteristic disturbance in cognition associated with eating disorders and/or in the service of weight loss.

However, it does not always occur in the context of eating disorder, nor is it always associated with a desire for weight loss and most cases in the psychiatric literature are not reported in sufficient detail to justify confident conclusions regarding the association of bloodletting with one clinical diagnosis (including psychosis) rather than another. Although the association to eating disorder seems strong, there are inadequate grounds to exclude the comorbid diagnosis of personality disorder, or, indeed, other psychiatric conditions. However, it is clear that self-bloodletting can occur in the absence of eating disorders and that it is not pathognomonic of any one diagnosis. It remains possible that in the light of the evidence currently available, its association with personality disorder may be constant and that Axis-II diagnoses have been missed or unrecorded in some of the reported cases.

Further research, especially in the fields of eating disorders and personality disorders, may be likely to reveal a higher prevalence than previously discovered. Using a systematic approach to cases, which encompasses assessment of both Axis-I and Axis-II diagnoses, together with an evaluation of patients' understanding of bloodletting and any personal meaning of the behaviour to them may reveal more of the underlying psychopathology associated with this unusual behaviour.

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