

MANAGEMENT OF ADULT PATIENTS WITH ANOREXIA NERVOSA: A LITERATURE REVIEW

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SUMMARY

Background: Anorexia is a frequent pathology; not only does it cause major changes in patients' quality of life, but also the mortality rate is high. This mortality mainly affects young people. However, care remains controversial. The aim of this literature review is, therefore, to review current guidelines.

Subjects and methods: A review of the literature published between 2006 and 2017, from articles contained in the Cochrane, PubMed, Scopus and PsychINFO databases. Keywords were 'anorexia nervosa', 'adults' and 'management'.

Results: Patient management must be multidisciplinary and prioritise weight gain. For this to happen, outpatient monitoring must include a gradual normalisation of eating habits. This always involves psychotherapy and sometimes prescription medication. However, no specific therapy or psychotropic drug has demonstrated statistical superiority in the management of anorexic patients. Cognitive behavioural therapy remains the most effective therapy in preventing relapse, and family therapies for the treatment of young patients who are still living with their families of origin. Hospitalization is sometimes necessary and must then include gradual and closely monitored refeeding to avoid the potentially fatal refeeding syndrome.

Conclusions: The management of anorexic patients is complex but always involves reaching a normal weight. The best prognosis is found in young patients with the least chronic disease.

Key words: anorexia nervosa – adults - treatment

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INTRODUCTION

Anorexia nervosa (AN) is a common psychiatric disorder. It mostly affects young women and its life-time prevalence is 5 out of 100 women. It is mainly present in countries that are socio-economically developed. AN has a high mortality rate due to its medical (which cause half of all deaths) and psychosocial complications. Overall, AN mortality is the highest of all psychiatric disorders - five times higher than in the general population for age and sex. In addition, on average, death occurs in subjects who are between 25 and 34 years of age.

Even without taking this mortality rate into account, AN has a far greater impact on the quality of life of patients than other psychiatric disorders. This is mainly due to the high relapse rate.

The management of AN patients remains very difficult and controversial. In practice, patients deny their own needs. And even when they are persuaded of the need for care, it is necessary to be extremely cautious due to the risk of refeeding syndrome (ionic alteration linked to too-rapid refeeding) and undernourishment (too slow refeeding, which keeps the patient in deficiency, often due to a fear of refeeding syndrome).

Controversy surrounds each stage of an adult AN patient's 'classic' care journey, which raises the following three questions: What strategies should be used for outpatient consultations? Are there pharmacological treatments that can help these patients? How can hospitalization be best managed?

SUBJECTS AND METHODS

A literature review was conducted of studies published between 2006 and December 2017. Studies were identified in the PubMed, Scopus, PsychINFO and Cochrane databases and focused on current adult therapies. Keywords used were 'anorexia nervosa', 'adults' and 'management'. Ninety articles were selected.

RESULTS

Whatever the care regime, and independent of the point of view of the author, patient management must be multidisciplinary, and include physicians, psychologists, psychiatrists, dieticians, nurses, occupational therapists and social workers (Hay et al. 2014, 2015). Communication within the team is crucial: what is said to the patient and their family must be coherent and non-judgmental.

Outpatient care

The first objective of therapy is to stabilize the patient's physical state, in particular, to correct metabolic abnormalities. This relies, notably, on weight gain. All weight and BMI goals must be clarified with the patient at the outset and the entire team must be informed. Setting realistic objectives requires a detailed knowledge of the patient's situation at the beginning of treatment. Taking a basic history is essential, together with a physical examination, notably blood sugar and prealbumin tests. Other complementary examinations are required: an electrocardiogram, or even an echo-

cardiogram, an abdominal scan (to exclude mesenteric artery syndrome), a bone scan, and a cerebral MRI scan (in the case of cognitive disorders).

Once weight gain and dietary behaviour goals have been clarified, treatment should be adjusted to be as unrestrictive as possible, and as consistent as possible with the compromises agreed with the patient. It is important to keep in mind that weight gain is very anxiogenic. Most authors agree that to reach the target BMI is necessary to combine psychotherapy and the normalization of eating behaviours (Fisher et al. 2010, Claudino et al. 2006, Forman et al. 2016). With respect to the different psychotherapies that are available, none has been demonstrated to be clearly better in the management of adult AN patients. Their effectiveness is consistently limited: studies are small and follow-up is short-term. Various elements must be taken into account - notably that care based solely on dietary advice is not enough. Cognitive Behavioural Therapy (CBT) is the most interesting treatment for AN related to sexual trauma but also in preventing relapse. With respect to family therapies, they remain the first-line treatment for adolescents and young adults who still live with their families of origin, although some studies question this (Swenne et al. 2017, The Society for Adolescent Health and Medicine 2015).

Pharmacotherapy

Should psychotropic drugs be prescribed to AN patients? If so, which ones? When? For how long? So far, drug therapy has provided relatively little evidence of its effectiveness. Most studies suggest that drugs should not be a first-line treatment (Claudino et al. 2006, Forman et al. 2016, Walsh et al. 2017). They are only necessary when the patient does not respond to any other treatment (i.e. does not gain weight) or when psychological symptoms persist despite weight gain.

When the decision is taken to prescribe a psychotropic drug, antidepressants can be used to treat depressive, anxiety and obsessive-compulsive disorders often associated with anorexia. However, some studies claim that such drugs have not been demonstrated to be effective in treating these disorders (Claudino et al. 2006, Attia 2012, Marzola et al. 2015), notably with respect to overall improvement, acceptability of treatment, weight gain or dropout rate. Moreover, body image distortion and food perception disorders do not respond to their administration. Nevertheless, some authors consider it reasonable to offer an antidepressant to treat depressive and anxiety disorders, notably those that persist during weight gain (Walsh et al. 2017, Pike et al. 2017). They advise against tricyclics (which increase the risk of heart rhythm disorders) and bupropion (which increases the risk of food crises) (Walsh et al. 2017). The prescription of antipsychotics is consistent with irrational thoughts suggesting possible delusional disorders. These drugs are all the more interesting as one of their side effects is weight gain: some random-

ized trials have suggested that olanzapine (2.5 to 10 mg/day) may increase weight gain (Walsh et al. 2017, Attia 2012, McKnight & Park 2010). This effect, when demonstrated, is statistically modest (Walsh et al. 2017, Lebow et al. 2013, McKnight & Park 2010, Hay et al. 2014). Antipsychotics do not alter misperceptions of the body. Some studies have even shown an increase in eating symptoms and anxiety disorders (probably related to patients being aware of the effect of weight gain and/or increased hunger signals) (Lebow et al. 2013, McKnight & Park 2010). On the other hand, they appear to limit depressive disorders. However, the existence of significant side effects (extrapyramidal syndrome, QT prolongation, etc.) supports their introduction during hospitalisation rather than outpatient care. Another controversial issue regarding their use is the dose to be prescribed and the duration of treatment (McKnight & Park 2010).

Regardless of the type of medication prescribed, recommended practice is to start with small doses to limit side effects (Walsh et al. 2017). Side effects increase as the patient is thinner. It should also be noted that low weight decreases the response to these drugs. Finally, the ambivalence of patients with respect to a drug that could cause them to gain weight must be taken into account.

Hospital management

There is consensus on the criteria that indicate hospitalisation: significant medical instability (incessant weight loss, bradycardia below 40 or tachycardia at rest, hypokalaemia, hypoglycaemia, hypophosphatemia, arrhythmia, orthostatic hypotension, <36.1°C, poor cerebral perfusion, organ damage, severe dehydration, acute complications, severe refeeding syndrome); significant psychological instability (mood disorder, alcohol abuse); or when outpatient care fails. The objectives of hospitalization are the same as those of outpatient therapy, namely to correct metabolic disorders and the complications of anorexia through weight gain. These objectives must be clarified at the beginning of hospitalization, together with the requirements of the hospital setting. Patients must be monitored during meals and for one hour afterwards to limit compensatory behaviours. Physical activity is restricted at first and then gradually reintroduced.

It is vital not to over-medicate nutrition. However, a nasogastric tube is required if the BMI is below 15. Gastrostomy is only very rarely indicated and parenteral nutrition is only indicated in the absence of an alternative. The target weight gain of an inpatient is 1 kg/week (between 500 and 1400 g). In practice, therapists do not attempt to go faster than this for fear of a triggering a potentially fatal refeeding syndrome, which usually occurs within the first three (up to 15) days of rapid re-feeding. This risk is present whether the diet is oral, enteral or parenteral. The syndrome manifests in hypophosphatemia, hypokalaemia, vitamin D

deficiency, heart failure, oedema and coma. To avoid this, it is advisable to start with an electrolytic correction.

There is no consensus on the number of calories to be provided initially. One study recommends starting at 5–10 kcal/kg/day and increasing to 15–20 kcal/kg/day within 48 hours (30–35 kcal/kg/day for severe cases) (Robinson & Nicholls, 2015). The number of calories should be slightly higher than the patient's energy expenditure. After the first few days, a balanced diet is offered in terms of the full range of nutrients, including carbohydrates, protein (1.5 g/day) and fat. Thiamine is added (200–300 mg/day to be gradually reduced), together with ascorbate and folic acid. One study proposes starting with 1500–1800 kcal/day (Steinglass et al. 2016). Once patients are stabilized, this is increased by 300 kcal every three days, reaching 45 kcal/kg/day to be maintained for six months. More recent studies contradict these figures and propose a higher calorie intake from the outset (The Society for Adolescent Health and Medicine 2015, Garber et al. 2016, Haynos et al. 2016).

Whatever the approach, during the refeeding period, the ionogram should be monitored every day or every other day, then once a week. If, despite these precautions, refeeding syndrome occurs, it is imperative to first restore the ionic balance and to consider a reduction in food intake. Sometimes, there is no full-blown refeeding syndrome – only rehydration oedema. In this case, treatment includes bed rest with legs elevated, fluid intake monitoring and a low salt diet.

The objectives to be achieved before discharge are the resolution of cognitive problems and stabilisation of the physical state but, above all, a discharge weight that is as close as possible to normal. In practice, the more normal the discharge weight, the lower the risk of relapse (Steinglass et al. 2016). However, the relapse rate is close to 50%. Outpatient follow-up must therefore be offered at discharge from hospital.

DISCUSSION

The purpose of this study is to review current knowledge about the management of AN disorders. However, the results obtained by the various studies reviewed highlight that no particular therapy is better than any other. The physical risks associated with weight loss in patients should be limited and the psychological symptoms associated with this disease should be treated to limit mortality.

Specific elements, such as antipsychotic medication or CBT, are difficult to assess because the studies currently available are based on small patient samples and have a high drop-out rate.

New studies involving more patients and extending over longer periods would be useful. In practice, antipsychotics or antidepressants take several weeks for their effects to be fully felt, and most studies do not last this long.

CONCLUSIONS

The management of AN patients is extremely complex, there are multiple famine-related complications, and treatment almost always involves weight gain. There is no evidence to support one particular therapy over any another with respect to individual therapies. Family therapies seem more effective in the short term, but there is not enough evidence in the longer term. The best response rates are found in the youngest groups and with the least chronic disease. Pharmacotherapy has not been shown to have a dramatic effect in these disorders and great attention must be paid to side effects, especially in very thin patients.

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Contribution of individual authors:

All authors made substantial contributions to the design of the study, and/or data acquisition, and/or its analysis and interpretation.

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