7. Diagnosis of Eating Disorders

Key Questions:

7.1. What clinical criteria are useful to diagnose eating disorders?

7.2. How are eating disorders diagnosed?

7.3. What is the differential diagnosis of eating disorders?

7.1. What clinical criteria are useful to diagnose eating disorders?

Clinical criteria for the diagnosis of AN and BN are well defined in the International Statistical Classification of Diseases and related health problems, tenth edition (ICD-10) of the World Health Organisation (WHO, 1992) and in the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV) and text revision (DSM-IV-TR) of the American Psychiatric Association (APA, 1994 and APA, 2000, respectively).

The DSM-IV/DSM-IV-TR classifies mixed and partial forms of eating disorders, such as EDNOS, where BED is included, while the ICD-10 refers to them as atypical AN, atypical BN or unspecified eating disorders.

The DSM-IV/DSM-IV/TR, in contrast to the ICD-10, differentiates between two types of AN (restricting and compulsive/purging) and two types of BN (purging and non-purging) depending on the predominant behaviour.

The Spanish versions of these classification systems have been subsequently edited: ICD-10 (2000) and DSM-IV-TR (2008). In the latter, the equivalent between classifications is presented (DSM-IV-TR, ICD-9 and ICD-10). In Annex 2.7. diagnostic criteria according to both classifications are described.

Recommendation

7.1. It is recommended to follow the diagnostic criteria of the WHO (ICD-10) and the APA (DSM-IV or DSM-IV-TR).
7.2. How are eating disorders classified?

The diagnosis of eating disorders is based on a clinical interview complemented by complementary physical, psychopathological and behavioural examinations aimed at assessing the existence of physical, emotional, behavioural and cognitive disturbances. Diagnosis has good validity and reliability.

Anamnesis

When an eating disorder is suspected, both a personal and family complete clinical history must be performed. Given that patients are usually young adults and adolescents, these interviews must have certain specific characteristics to overcome the difficulties derived from a person’s willingness to reveal his/her motives, symptoms and behaviour, sometimes an obstacle to making a diagnosis. Thus, the empathy, support and compromise that is perceived during the clinical interview will be essential in enabling the patient to reveal fears regarding weight gain, eating behaviour, purging behaviour and other disordered behaviour such as excessive exercise. When deemed appropriate, this clinical history must be accompanied by a corroborative account from parents or other relative.

After explaining the reason for the consultation, if patients are accompanied by their family, the latter must be asked to leave the room to generate a climate of privacy where the patient can freely respond to the questions asked (See chapter 12, “Legal Aspects”).

The confidentiality of the medical act must always be emphasised, making it clear to the patient that none of what is discussed between him/her and the health care professional will be disclosed to parents or family members unless otherwise specified by the patient, except when there is risk to the patient’s physical or psychological integrity (See chapter 12, “Legal Aspects”). The performance of blood work and other tests must be agreed upon with the patient. The health care professional will try to be perceived as somebody who looks after the patient’s health, and not as an ally to the family. The patient’s genogram and whom he/she lives with must be known. To this end, family and personal pathological history must be requested (especially if it relates to mental health: depressions, phobias, addictions, eating disorders, physical and psychological abuse).

During the anamnesis, questions will be asked regarding physical disorders (weight, skin and mucosa, menstruation), emotional disorders (anxiety, depression, social alienation, eating disorder triggers [see chapter 4, “Definition and Classification of Eating Disorders], sleep disorders), behavioural disorders (diets, exercise, binge-eating, extravagance with food, personal and family eating habits, purging behaviour, physical hyperactivity) and cognitive disorders (image distortion, disease awareness).

The semi-structured interviews most frequently used to diagnose eating disorders are: section H (for eating disorders) of the diagnostic interview Composite International Diagnostic Interview (CID-I) developed by the WHO, 1990 and Eating Disorders Examinations (EDE) developed by Cooper and Fairburn, 1987.
Although these two interviews are adapted to diagnostic criteria defined by the DSM-IV-TR and the ICD-10, there is consensus that the most reliable and best validated semi-structured interview for the diagnosis of eating disorders is the EDE. The 12th edition of the EDE (EDE-12) developed by Fairburn and Cooper, 1993 has a Spanish version, adapted by MR Raich, 1994 and validated in our setting on a sample of 99 female university students, that has proven to be a reliable and valid tool. Another adaptation and validation of the EDE on a sample in our setting, performed by Robles, et al., 2006, has been identified, presenting appropriate psychometric qualities that are similar to those of the original version (See Annex 2.8., EDE-12).

There are preliminary results of the child version of the EDE-12 (ChEDE-12) on a sample of 15 children with AN and 15 with other eating disorders and two age-adjusted groups of 15 control subjects. Preliminary results indicate that the ChEDE-12 differentiates children with AN from children with other eating disorders and from control subjects. There is no information regarding the adapted version validated in our setting in these ages.

During the anamnesis it may also be helpful to ask only the items relating to the diagnostic criteria of eating disorders described in the ICD-10 and DSM-IV-TR. This measure, which has been employed frequently in the literature, facilitates the diagnostic process, as well as the patient’s participation, without compromising diagnostic efficacy. With this restriction, the duration of interviews is reduced to ten or fifteen minutes per person.

**Informing the patient with an eating disorder**

As usual, when informing the patient on his/her disease, care must be taken in how the message is conveyed, adjusting it to the patient’s age, educational level and beliefs, amongst other aspects. To make this task easier for the health care professional, this CPG provides material aimed at children, adolescents and adults with eating disorders or who are at risk of developing them. This material may also be useful to family members, friends or people who interact with patients, as well as for the general population (See Annex 3.1.).

The diagnosis of an eating disorder must be communicated clearly, describing the important characteristics of this mental disorder. It is also helpful to explain the physical dimensions and disturbances it causes, as well as its evolution and prognosis.

The patient must not be made to feel guilty. However, it must be clearly explained that he/she is suffering from a disease, that it is treatable and curable but that his/her involvement is crucial for recovery.

**Anamnesis and family awareness**

It is very important to study the family environment and detect possible disturbances in its correct functioning (disorganised families, strict rules, etc.). Other family-related risk factors must also be assessed (mothers who are very critical of physical appearance, family conflicts, a history of weight loss diets in other family members, especially the mother, etc.) (See chapter 4, “Definition and Classification of Eating Disorders” and chapter 11, “Prognosis”).

Communication with the family must be established to explain eating disorders, to emphasise that their active involvement in the patient’s treatment and recovery process is crucial,
to help them cope with the situation and to make them aware that positive changes in the family routine must be made (for example, strengthen the patient’s maturation, autonomy and responsibility processes, by establishing rules and guidelines adjusted to the child’s age, stimulate the expression of both positive and negative feelings). The patient information elaborated for this CPG can be useful (See Annex 3.1).

Eating Disorders in Adults

When faced with potential cases of eating disorders in adults, clinical history questions should be adapted to a conventional interview with an adult, who is responsible for his/her acts and decisions, who meets with the health care professional alone most of the time, and where he/she usually prefers the family not to be involved.

The adult patient’s economic independence enables easier access to harmful or toxic drugs, which is why the patient’s personal toxicopharmacological background must be emphasised in order to detect abuse or misuse of substances.

In these cases, it is also more likely to find work-related, economic or social problems as maintaining factors or, sometimes, as eating disorder triggers.

It is important to highlight that there are also thin, non-pathological constitutions that are well-adjusted to development.

Physical exploration

Physical exploration is less useful than anamnesis in establishing diagnosis. However, complete physical exploration is crucial and must be aimed at assessing the patient’s nutritional state and detecting possible secondary physical complications resulting from dietary restraints and/or purging behaviour that would determine the intervention of other specialists or not.

Data corresponding to vital signs (heart rate, blood pressure, axillary temperature and respiratory rhythm) will be collected; in patients with a certain degree of malnutrition these signs will be in the lower limits. For weight and size, the BMI (BMI=weight kg/size m² ) will be determined. If the BMI is >25 it is considered overweight; if it is between 25-18.5 is considered normal, and if it is <18.5 it is considered malnutrition (low weight). ICD-10 establishes a BMI<17.5 as a diagnostic criteria for AN. Patients with BN can present normal weight and even slight excess weight. In patients under the age of 18 years, the BMI must be calculated and compared to the percentiles pertaining to these ages.

A general examination of the different body systems will be performed with special attention paid to signs of malnutrition and the detection of growth or sexual development:

- Exploration of skin and mucosa and dental exploration. Hydration state of the skin and mucosa (skin fold), presence of carotenic pigmentation, presence of hypertrichosis, alopecia, brittle nails, skin injuries that indicate self-aggression (cuts, scratches, burns), presence of petechias, purpura, parotid hypertrophy and/or sub-maxillary glands, calluses or wounds on the back of the hand or on the fingers from induced vomiting (Russell’s sign), chronic orodental or pharyngeal lesions,
dental erosion, enamel demineralisation and cavities.

- Cardiocirculatory examination. An electrocardiogram must be performed on patients with AN and signs of malnutrition and also on patients with BN at risk of dyselectrolytemia. Bradycardia may be found. Hypopotasemia may cause a U-wave, T-wave flattening/inversion, premature ventricular contractions and ventricular arrhythmias, and hypomagnesemia can also produce arrhythmias.

- Respiratory examination. Possible opportunist infections. In patients who vomit, possible pneumothorax or even aspiration pneumonia.

- Neurological exploration. Detection of possible polyneuropathies secondary to vitamin deficiency, detection of neurological symptoms secondary to hypopotasemia and detection of aqueous intoxication

Psychopathological and behavioural examination

In the psychopathological and behavioural examination different instrument can be administered with the objective of assessing eating behaviour and the psychopathological situation (impulsivity, anxiety, depression, personality and obsessiveness). (See chapter 10, “Assessment”).

Complementary examinations

Based on the results of the physical exploration, further examinations that include laboratory tests and other explorations can be performed. However, an excess of examinations to confirm treatment may be counterproductive.

Laboratory tests

Blood work should include the following parameters: hemogram, glycaemia, total cholesterol, triglycerides, liver enzymes (AST, ALT and GGT), ions (K, Na, Cl, Ca, P and Mg), total proteins and albumin, creatinine and urea, TSH, free T3 and T4, coagulation (TP, TTPa), urine (sediment and osmolarity) and female hormone profile.

The analytical examination of eating disorders enables the ruling out of possible organic causes of weight loss and for the patient to pick up his/her results, making a new kind of weight management and more time for a detailed interview on losing weight possible.

A normal analysis can never rule out an eating disorder. In these cases, it can be counterproductive given that it can favour “false tranquillity” in the patient, family and non-specialised expert; it can become a positive reinforcement for the patient’s attitude; or, the patient may even view the professional as an ally of the family.
Other examinations

To ascertain whether there are bronchoaspirative lesions in patients who vomit a chest x-ray will be requested, as well as when other pathologies such as tuberculosis are suspected. Bone x-ray and densitometry enable the assessment of bone age in people in development and the presence of osteoporosis or osteopenia. Electrocardiography, amongst other tests, is indicated when there is suspicion of laxative abuse. The decision to perform more sophisticated examinations is left to consulting specialists.

Diagnostic difficulty is greater in cases where there are comorbidities. The most frequent comorbidities are: diabetes mellitus, obesity, malabsorption syndrome and thyroid diseases of organic origin and substance abuse and dependence, mood disorders, obsessive-compulsive disorders, personality disorders, as well as impulse control disorders.

Recommendations

| D | 7.2.1. | Health care professionals should acknowledge that many eating disorder patients are ambivalent regarding treatment due to the demands and challenges that it entails. (Adapted from recommendation 1.10.1.1 of the NICE CPG). |
| D | 7.2.2. | Patients and, when deemed necessary, carers should be provided with information and education regarding the nature, course and treatment of eating disorders. (Adapted from recommendation 2.10.1.2 of the NICE CPG). |
| D | 7.2.3. | Families and carers may be informed of existing eating disorder associations and support groups. (Adapted from recommendation 2.11.5.5 of the NICE CPG). |
| ✓ | 7.2.4. | It is recommended that the diagnosis of eating disorders include anamnesis, physical and psychopathological examinations and complementary explorations. |
| ✓ | 7.2.5. | Diagnostic confirmation and therapeutic implications should be in the hands of psychiatrists and clinical psychologists. |
7.3. Differential Diagnosis of Eating disorders

Despite the existence of certain well-defined diagnostic criteria for eating disorders, in clinical practice there are often difficulties relating to the differential diagnosis with other conditions that require rigorous clinical assessment.

In regards with AN, the differential diagnosis must be made with those pathologies that can present significant appetite loss and weight loss, even though the main features of AN, such as body image distortion, the desire to perpetuate weight loss and the fear of becoming fat, are not present in all cases:

• Mental disorders: depression, anxiety, psychotic disorders and substance abuse
• Diabetes mellitus
• Tuberculosis
• Hyperthyroidism
• Neoplasias of the central nervous system
• Less frequent: lymphomas, sarcoidosis, Addison’s disease, celiac disease, superior mesenteric artery syndrome (it may sometimes be a complication of AN), AIDS, lactose intolerance, panhypopituitarism, etc.

The differential diagnosis of AN is especially indicated in adult patients, given the atypical age of onset of the disorder.

The differential diagnosis of BN is more limited than AN and includes organic conditions that present hyperphagia and weight gain:

• Diabetes mellitus
• Hypothyroidism
• Kleine-Levin Syndrome (idiopathic disorder that especially affects men aged 20-30 years and that presents with hypersomnia and hyperphagia).
• Hypothalamic lesions
• Tumours causing hyperphagia
• Major depression, atypical depression, borderline personality disorder (BPD).

The differential diagnosis of EDNOS must be performed with pathologies that may present with weight loss or gain and/or decreased or increased appetite. The differential trait of EDNOS is body-scheme distortion and excessive and irrational focus on weight and diet.

In BED, the differential diagnosis must be performed with the same pathologies described for BN and with clinical pictures of impulse control disturbance that may present with binge-eating episodes, such as those that occur in BPD.