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Clinical Management of Avoidant Restrictive Food Intake Disorder (ARFID)

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Abstract

Avoidant Restrictive Food Intake Disorder (ARFID) is a feeding disorder resulting in persistent failure to meet one's nutritional and/or energy needs. Recently included in the DSM-V, it differs from Anorexia Nervosa by lack of any body image disturbance but may carry a similar high risk of adverse outcomes if not appropriately treated. This article provides an overview of assessment, emerging treatment options and the need for input from a multi-disciplinary team. Medical providers are an essential component of the team and it is therefore important to be aware of the modifications to the diagnostic criteria and the advances in the management of these disorders.

ARFID differs to Anorexia Nervosa as there is no dissatisfaction with body image, fear of weight gain or drive for thinness. However, ARFID can have serious consequences and to meet the DSM-5 diagnostic criteria, the restrictive or avoidant eating behaviours must lead to a persistent failure to meet nutritional requirements and must be associated with one of the following; significant weight loss, faltering growth or nutritional deficiency, dependence on nasogastric feeding (NG) or nutritional supplements, or a significant impact on psychosocial functioning.

As ARFID is a relatively new diagnosis, there is a limited amount of epidemiological data available. An interview-based study in Australia of 5737 adolescents, 15 years and older, reported a 3-month point prevalence of ARFID of 0.3%.¹ In Switzerland, a study based on a self-report questionnaire, in a younger cohort of 1444 schoolchildren aged 8–13 years, reported a higher point prevalence of 3.2%.² This emerging data suggests that ARFID may be as common as Anorexia Nervosa and Bulimia Nervosa. North American studies have shown that between 5–12% of patients presenting for eating disorder care at outpatient clinics³⁻⁵ and 22.5–24.6% of patients presenting at day programs^{6,7} met DSM-5 criteria for ARFID.⁸

Preliminary studies suggest that, compared to patients with Anorexia Nervosa or Bulimia Nervosa, patients with ARFID are more likely to be younger,^{9,10} include a greater proportion of males,^{9,11} experience a longer duration of illness before treatment presentation,⁹ and are more likely to have a co-morbid medical condition.¹⁰

The symptoms of ARFID include weight loss, restricted range and amount of food, avoidance of certain food textures, fears of choking or vomiting, lack of interest in food, vague gastrointestinal symptoms at mealtimes ("upset stomach", "feels full") and no dissatisfaction with body image or weight. The physical signs and symptoms of ARFID are similar to those of Anorexia Nervosa and include dry and brittle skin, hair and nails, lanugo hair on body, abdominal pain, constipation, bloating, cold and mottled peripheries, orthostatic hypotension, syncope, bradycardia, amenorrhoea, delayed puberty, growth retardation, poor concentration, and mood changes.

The medical provider plays an essential role in recognising ARFID, out-ruling alternative diagnoses (thyroid dysfunction, coeliac disease, inflammatory bowel disease), and assessing for medical complications. If there is suspicion of an eating disorder or ARFID then both a psychological assessment and a medical assessment should be carried out. The PARDI (PICA, ARFID and Rumination Disorder Interview) is a recently developed structured interview that is currently under evaluation for the assessment of and severity of these diagnoses. ¹²

Using a simple conceptual framework, BBI (devised by one of the authors, F. McN.), provides clinicians with a helpful framework to distinguish ARFID from other eating disorders. This concept divides the presentation into three different domains: Behaviour, Belief and Impairment (BBI). Applying this to ARFID, the presenting behaviour includes dietary restriction leading to reduced caloric intake and limited, unbalanced nutrition, avoidance of specific types of food textures, colours and smells or eating at an abnormally slow pace. In ARFID, there is an absence of excessive exercise, (unless designed to speed up gastric emptying and associated discomfort) and there are no compensatory behaviours, such as, bingeing or purging. Associated beliefs include fears of choking, vomiting or physical illness as a consequence of eating certain foods. Younger children may have difficulty in accurately reporting their feared belief and origins of same. For example, children who experience delayed gastric emptying after eating fatty foods, may associate this with increased pain and specifically avoid fatty foods, leading clinicians to misinterpret this as fat phobia. A child with autism or learning difficulties, may have sensory hypersensitivity, and may experience both the abdominal distension linked with delayed gastric transit, or re-establishment of peristalsis as severely painful. An avoidance of a 'fat' (i.e. distended) abdomen may once again erroneously be attributed to underlying eating psychopathology. A patient with ARFID, often has an insight into their low weight and may have a desire to gain weight. Co-morbid mental health difficulties can also be present, including Autistic Spectrum Disorder, separation anxiety, attachment disorder or intellectual disability, and contribute to the intensity of the presentation. Impairment includes medical complications secondary to weight loss, nutritional deficiencies, and psychological impairment including anxiety, low mood, irritability, social isolation and difficulty concentrating.

Figure 1: The BBI Model of Clinical Assessment.

Behaviour:

- Calories: restricted, normal, excessive
- Nutrition: limited, balanced, loading
- Exercise: none, healthy, excessive
- **Compensatory behaviours:** none, medication, binging, purging

Beliefs:

- Body image: dissatisfied, neutral, satisfied
- Mental health: healthy, distressed, anxious, depressed, obsessive

Impairment:

- Weight: below expected, average, above expected
- Physical health: healthy, borderline, unhealthy

Best practice treatment guidelines have not yet been developed for ARFID due to the shortage of empirical data available. Until there is more evidence-based guidance available, it is reasonable to use guidelines for other restrictive eating disorders to assess risk and to formulate treatment goals.¹³ The Royal College of Psychiatrists utilise a colour-coded risk assessment framework in their Junior MARSIPAN Guidelines for the management of young people with Anorexia Nervosa.¹⁴ The Society for Adolescent Health and Medicine uses similar parameters for the indications for inpatient management of restrictive eating disorders.¹³ Important aspects of the risk assessment include physical parameters such as, weight and extent of weight loss, percentage median BMI or percentage ideal body weight, cardiovascular assessment (including blood pressure, heart rate and ECG assessing for bradycardia and QTc prolongation), hydration status, temperature and electrolyte disturbances. Acute food refusal and a comorbid psychiatric or medical condition may limit outpatient management options.^{13,14} It is important to note that despite normal BMI, some patients with ARFID may warrant urgent inpatient admission due to medical instability. Medical admission is often indicated if the patient's percentage median BMI is less than 75%.¹³

If inpatient admission is required, multi-disciplinary management is essential with input from medical, mental health, nutritional and nursing departments. Nutritional rehabilitation with a structured refeeding programme, monitoring for refeeding syndrome and cardiac abnormalities are the mainstay of the initial inpatient management.¹³ Nasogastric tube (NGT) feeding may be considered if the patient is unable to meet their nutritional requirements orally or fearful of oral intake. Although, there is empirical evidence for the use of NGT feeding in patients with Anorexia Nervosa, this is not the case for those with ARFID, and further studies are awaited. It is important to remember that patients with ARFID may have a hypersensitive sensory state, even in the absence of a diagnosis of ASD, and the visceral sensations associated with NGT placement and refeeding could lead to conditioned food aversions.¹⁵

When inpatient admission is not indicated, the patient can be managed by a multidisciplinary team in the community. Attention must be focussed on restoring nutritional intake, weight gain, using a graded behavioural approach linked with anxiety management strategies.

Comorbid psychological difficulties, such as anxiety or post-traumatic stress, also need to be addressed and may benefit from referral to community-based counselling, or if severe, specialist child and adolescent mental health services.⁸ A specialist outpatient eating disorder programme may be warranted if a patient is not making progress with an outpatient team or if they continue to lose weight and are at risk of requiring an inpatient admission.⁸ Significant parental distress may also necessitate more intensive and specialist outpatient support. Weight restoration, reestablishment of growth trajectories and resumption of menses in amenorrhoeic females are reasonable treatment goals.¹³ When setting a target weight range, the individual's previous height, weight, BMI percentiles, pubertal stage and growth trajectory should be considered as well as their percentage median BMI.¹³ The target treatment weight range needs to be periodically reassessed, especially during periods of growth. Setting too high an initial target, even if appropriate, may induce too much anxiety on the patient, and parents, and be counterproductive. Severe restriction or avoidance of particular food groups in ARFID can lead to nutritional deficiencies. Specific vitamins and minerals should be supplemented if there is laboratory evidence of deficiency or if the patient displays clinically significant symptoms.⁸

Family Based Treatment, which is the first line treatment of Anorexia Nervosa in the outpatient setting, places an emphasis on the role of parents in successful management, and empowers parents to meet this challenge.¹³ However, other psychological based therapies are emerging for ARFID. Massachusetts General Hospital Eating Disorders Clinical and Research Program team have developed a cognitive behavioural therapy for ARFID which is currently under evaluation in an open trial showing promising preliminary results.⁸

In summary, physicians can remain optimistic that early and accurate diagnosis, coupled with emerging evidence-based management can lead to good and sustained outcomes for most patients with ARFID. Having an understanding of ARFID, and how it differs from other forms of eating disorders will lead to an improved therapeutic relationship with the patient and family, and improved outcomes.

Declaration of Conflicts of Interest:

The authors have no conflicts of interest to declare.

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