More than picky eating: Diagnosing and treating ARFID

Peter DeVries, MD, and Nicole Stettler, PhD, presenters

Tuesday, February 27, 2024

1

Disclosures

Peter DeVries, MD, and Nicole Stettler, PhD, have each declared that they do not, nor does their family have, any financial relationship in any amount occurring in the last 12 months with a commercial interest whose products or services are discussed in the presentation.

The presenters have each declared that they do not have any relevant non-financial relationships. Additionally, all planners involved do not have any financial relationships. Further, Rogers Behavioral Health does not accept commercial support for its CE programs.

2

Learning objectives

Upon completion of the instructional program, participants should be able to:

1. Recognize the three most common presentations of ARFID.
2. Describe two examples of how exposures can be applied to ARFID.
3. List three off-label medications used for ARFID.

3

What we'll cover in this webinar

Overview
- History of diagnosis
- Diagnostic criteria
- Demographic overview
- Comorbidities
- Currently available assessment tools

Psychopharmacology
- FDA-approved medications
- Off-label medications
- Medication management of comorbidities

Therapeutic approach
- Exposure to novel foods
- Exposure to body sensations
- Exposure to feared consequences of eating

Moderated Q&A

4

Presenter subjectivities

Dr. Peter DeVries

Professional identities

- Medical Director,
  Adult Inpatient Eating Disorder Recovery
- MD, adult psychiatry

- **Personal identities**
- he/him/his
- White, cisgender, able-bodied

Dr. Nicole Stettler

Professional identities

- Executive Director,
  Eating Disorder Recovery Services
- PhD, clinical psychology

Personal identities

- she/her/hers
- White, cisgender, able-bodied

We acknowledge that our experience, intersectionality, privilege – and lack thereof – inform what we each bring to our research, clinical practice, and teaching

5

ARFID: An overview

Please use the Q&A feature to send your questions to the moderator.

6

ARFID diagnosis

Added to *DSM-5* in 2013

- Prior, "Feeding Disorder of Infancy or Early Childhood," "Not Otherwise Specified"

Prevalence estimates

- 0.3% - 4.8% in general adult populations
  (Chua et al., 2021; Fitzsimmons-Craft et al., 2019; Hay et al., 2017; Hilbert et al., 2021)
- 0.3% - 15.5% in general child/adolescent samples
  (Kurz et al., 2016; Schmidt et al., 2018)
- 5 – 64% in specialized feeding or eating disorder settings
  (Sanchez-Cerezo et al., 2023)

7

DSM-5 diagnostic criteria

- Eating or feeding disturbance
- **Persistent failure** to meet appropriate nutritional and/or energy needs as evidenced by **at least one** of:
  - Significant weight loss or failure to achieve expected gain or faltering growth
  - Significant nutritional deficiency
  - Dependence on enteral feeding or oral nutritional supplements
  - "Marked interference" with psychosocial functioning

**Not better explained by lack of available food or by culturally sanctioned practices*

(American Psychiatric Association, 2022)

8

Symptom presentations

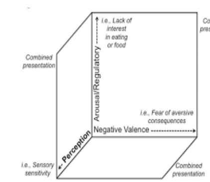
- **Lack of interest** in food or eating
- Avoidance based on certain **sensory characteristics** of food
- Concern about possible **negative consequences** of eating

- Presentations can overlap
- There is evidence supporting these 3 presentations (Zickgraf et al., 2019)
- Not meant to be an exhaustive list (Bourne et al., 2020)

9

Three-dimensional neurobiological model

- Sensory sensitivity presentation
  - Abnormalities in taste perception
- Low appetite/lack of interest presentation
  - Abnormalities in homeostatic appetite
- Fear of aversive consequences presentation
  - Fear responsiveness



Thomas et al., 2017

10

Diagnostic considerations

Very heterogeneous condition

- Using more lenient definitions of each criterion can double the number of individuals diagnosed with ARFID (Harshman et al., 2021)
- Some criticisms that the diagnosis lacks specificity to effectively guide clinical and research efforts (Sharp & Stubbs, 2019)

Picky eating vs ARFID

- Among adult sample, differentiators included food neophobia, rigid eating behaviors, and eating from a range of ≤ 20 foods, but not self-reported sensory sensitivity (Zickgraf, et al., 2016)

11

Assessment tools

Semi-structured interview

- Pica, ARFID, and Rumination Disorder Interview (PARDI; Bryant-Waugh et al., 2019)

Self-report questionnaire

- PARDI ARFID Questionnaire (PARDI-AR-Q; Bryant-Waugh et al., 2022)
- Nine Item ARFID Screen (NIAS; Zickgraf & Ellis, 2018)
  - Recommended to use in combination screening tool for non-ARFID ED (e.g., EDE-Q; Burton Murray et al., 2021)
- Eating Disturbances in Youth-Questionnaire (EDY-Q; Kurz et al., 2016)

12

Differential diagnosis of restrictive eating

Compared to patients with Anorexia Nervosa or OSFED, patients with ARFID…

- Younger at presentation (mean age 11.1 to 14.6 years; Sanchez-Cerezo et al., 2023)
- Higher proportion of males (21 to 50%; Sanchez-Cerezo et al., 2023)
- Typical weight and shape concerns (e.g., Barney et al., 2022)
- Similar dietary restriction to AN, but higher food neophobia (Becker et al., 2019)
- Preferred foods often energy-dense, high-fat, high-carbohydrate, processed
- Diets tend to be low in vegetables and protein
- Often chronically low weight instead of acute weight loss
- More delay discounting/preference for immediate rewards (Stern et al., 2024)

13

Co-occurring disorders

- *DSM-5-TR* criterion: eating disturbance is ***not attributable*** to a concurrent medical condition or ***not better explained*** by another mental disorder.
- When the eating disturbance occurs in the context of another mental disorder, the severity of the eating disturbance exceeds that routinely associated with the condition or disorder and ***warrants additional clinical attention.***

(American Psychiatric Association, 2022)

14

Co-occurring disorders

- Co-occurring anxiety disorder prevalence is 9.1-72%
  - GAD most frequently reported (21.4-50%)
- Co-occurring depressive disorder prevalence is 7.2-47.6%
- Co-occurring ASD prevalence is 8.2-54.75%
  - Estimates that 21-28% of youth with ASD are at high risk for ARFID
- Co-occurring ADHD prevalence 16-26.2%
- Comorbidity with GI reported in 19.4-43.8% of patients with ARFID

(MacDonald, et al., 2024; Sanchez-Cerezo et al., 2023)

15

Case example: "Joe"

A: 19 years old
D: Eating disorder, depression, anxiety
D: No history of disabilities, current physical health impacted by weight loss of 54 lbs
R: Not religious
E: American Indian
S: Heterosexual
S: From rural area
I: American Indian
N: U.S. citizen
G: Cisgender male

Social history

- Amateur MMA fighter

Family history

- Denied - family does not seek treatment

Past psych history

- One inpatient stay on mental health unit for ED
- No history of therapy - against family's beliefs
- No suicide attempts

16

Case presentation: Subjective

HPI
- 4-months of restricting after choking episode
- Consuming primarily ensures
- Anxiety about swallowing saliva
- Weight loss of 54#
- Desires weight gain and to "bulk up"

Alcohol and other drug abuse
- Infrequent marijuana use. None recently.
- No alcohol or illicit drug use

Psych ROS
- Anxiety
  - Restless, muscle tension, dyspnea, palpitations
- Depression
  - Low mood, low energy, anhedonia, hopelessness, passive SI

Medical ROS
- Weakness/fatigue
- Chest pain
- Dyspnea
- Intermittent dizziness with standing

17

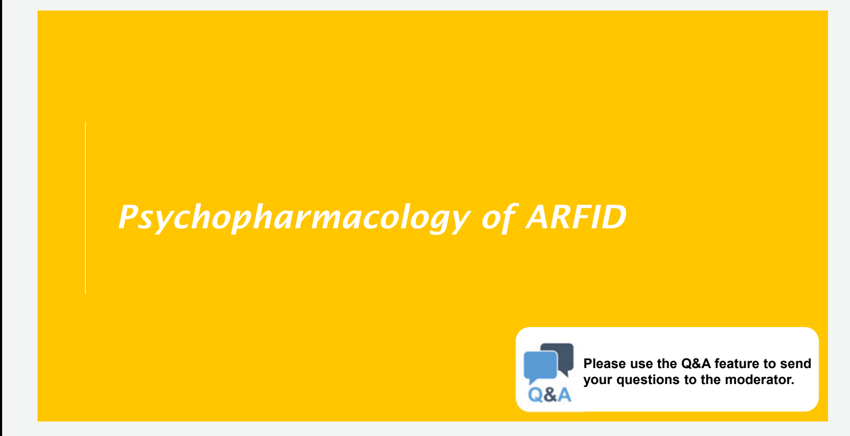
Case presentation: Intake assessments

Eating Disorder Examination - Questionnaire
- Total Score: 2.76; Restraint(3), Eating Concern (2), Shape Concern (3.25), Weight Concern (2.8)

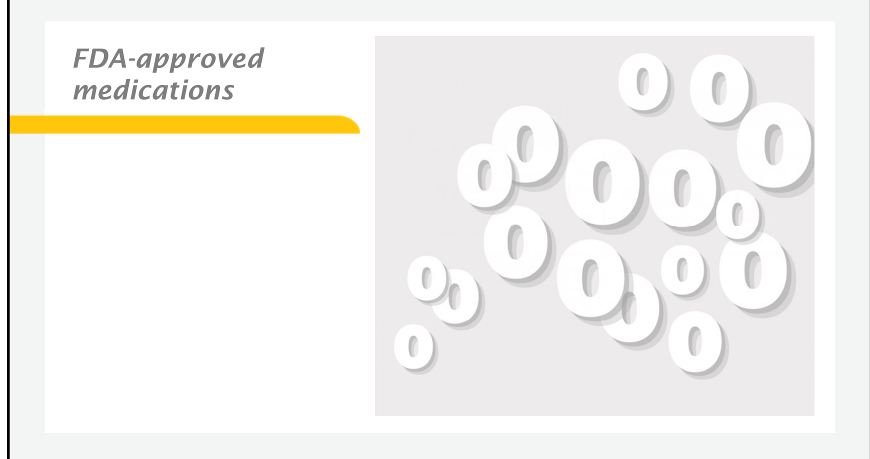
Quality of Life Enjoyment and Satisfaction Questionnaire
- Total Score: 55.36

Quick Inventory of Depression Symptomatology
- Total Score: 14 - Moderate (= 11~15); Suicidality: No(0)

18



19



20

Medications not FDA-approved

Antipsychotics

Aripiprazole
- Case study: Decrease in anxiety with meals, improved intake, weight gain (Colak Svri, et al, 2018)

Olanzapine
- Retrospective chart review of 9 patients: Reduced anxiety, depression; improved weight and CGI scores (Brewerton & D'Agostino, 2017)

Risperidone
- Case study: Increase PO intake, weight gain; decrease misphonia symptoms (Naguy, et al, 2022)

21

Medications not FDA-approved

Antidepressants

Mirtazapine
- Retrospective chart review of 14 patients: Improved weight gain (Gray et al, 2018)
- Case study: Reduced anxiety, nausea and improved appetite, weight gain (Naviaux, 2019)

SSRIs (+Hydroxyzine)
- Retrospective chart review of 53 patients: Improved compliance and participation in food exposures; improved weight, mood, and anxiety (Mahr et al, 2022)

22

Medications not FDA-approved

Anxiety medications

Buspirone
- Case study: 14F with fear of abdominal pain and emesis; reduced fear of vomiting and improved eating (Okereke, 2018)

23

Medications not FDA-approved

Miscellaneous

Cyproheptadine
- Systemic review: anyone underweight; No documented ARFID; Weight gain (Harrison et al, 2019)

D-cycloserine
- Double-blind placebo-controlled trial: 15 children ages 20-58 months; augments extinction of food aversion (Sharp et al, 2017)

Stimulants
- Two case studies: Worsening appetite suppression, stunting of growth (Pennell et al, 2016)

24

Medication management of comorbidities

- Depression
- Anxiety
- OCD
- ASD
- GI diagnoses
- Be aware of antidepressant side effects (Strawn et al, 2023)

25

Case example: Medication management

Starting medications

- Sertraline (liquid)
- Depakote (sprinkles)
- Lorazepam (tablet)
- Risperidone (ODT)

Medication changes

- Hydroxyzine 25mg tidac-->50mg tidac
- Sertraline 100mg daily-->150mg daily-->200mg daily
- Lorazepam 0.5mg BID--> Clonazepam ODT 0.25mg BID-->Clonazepam 0.25mg TID
- Risperidone 0.5mg BID PRN

26

Therapeutic approach to ARFID

Q&A Please use the Q&A feature to send your questions to the moderator.

27

Research evidence

50 studies as of December 2022
23 single-case study designs
42 with child/adolescent samples

Behavioral (16 studies)
Cognitive-behavioral (10 studies)
Family therapy (5 studies)
Combinations of these (19 studies)

Common treatment components include:

- Psychoeducation (on ARFID, nutrition, and/or anxiety)
- **Food exposure**
- **Anxiety management**
- **Family involvement**

(Willmott et al., 2023)

28

Exposure therapy

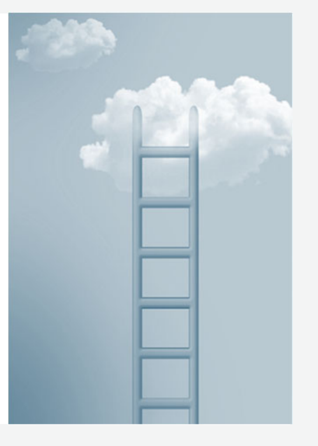
Well-established treatment for anxiety disorders

Process:

- Gradual contact with feared stimulus (exposure hierarchy or ladder)

Mechanism:

- Habituation (anxiety decreases without avoidance)
- Corrective learning (feared consequences less likely than expected and/or person more able to tolerate it than expected)



29

Applying exposure therapy to ARFID

Food exposure

- Feared or avoided foods

Anxiety management

- Feared or avoided body sensations
- Feared consequences of eating

Family involvement

- Address symptom accommodation (naturally increases exposure opportunities)

30

Exposure to novel foods

- Foods avoided due to aversive taste, smell, texture
- Collaboratively identify foods with patient
  - Prioritize based on nutritional needs and functional impairment
- Gradually increase approach (looking, smelling, tasting)
  - Tasting is critical (Birch et al, 1987)
  - 10+ tastings needed to reduce food neophobia (Dovey et al., 2008)
  - Habituation may be slower due to role of disgust (Menzel et al., 2018)

Not all foods tasted will ultimately be incorporated into diet

31

Food exposure: Case example

- At admission, only consuming Boost, ice cream, and milk
- Created fear food hierarchy based on unit menu
- Started with foods rated around 3 or 4 (0 to 7 scale)
  - Soup
  - Yogurt
  - Mashed potatoes
  - Peanut butter
- Initially started with a couple of bites, then increased in volume
- Repeated exposures
- Maintained previously worked on foods while adding new

32

Exposure to body sensations

Common sensations that prevent someone with ARFID from eating enough

- feeling fullness in stomach
- feeling nauseous
- feeling bloated

Natural and contrived interoceptive exposures:

Fullness	Nausea	Bloating
Gulp water or similar	Spin around	Push out your stomach

33

Exposure to feared consequences

Many possible feared consequences – need to assess

- Fear of vomiting
- Fear of choking
- Fear of allergic reaction

- *In vivo* exposures
- Imaginal exposures
- Response prevention for safety behaviors (e.g., checking labels, cutting into small bites)

34

Feared consequences: Case example

- Response prevention for spitting out saliva into cup
- Exposures targeting fears of choking

In vivo exposures	Imaginal exposures	Interoceptive exposures	Natural exposures
Swallowing 10 times quickly	Imagine choking – worst case scenario	Tongue depressor (gagging feeling)	Body sensations when eating (distress tolerance)
Swallowing tic-tacs			
Watch videos of someone choking			
Taking larger bites of food			
Taking large bites while thinking about choking			

35

Family involvement: Accommodation

- Maintenance factor for anxiety disorders, OCD, and other eating disorders
- Associated with more severe symptoms, worse treatment outcomes, and caregiver/family burden
- High levels of symptom accommodation reported in caregivers of youth with ARFID (e.g., Wagner, et al., 2020)
- Accommodation includes:
  - Participation in symptoms-driven behaviors (e.g., only buying preferred foods)
  - Modifications to family routines or schedules (e.g., only going out to certain restaurants with preferred foods)
- Psychoeducation
- Gradual, collaborative reduction in combination with exposure assignments

36

Accommodation: Case example

- Parents did not participate in treatment
- Addressed accommodation with others in environment – in this case, staff
  - Reassurance seeking – e.g. “am I going to choke?”
  - Initially sat by himself at meals/snacks due to feeling overwhelmed, but was able to re-integrate into group over course of admission
  - Focus on calories in with “safe” foods at first, then gradually reducing accommodation in concert with exposures

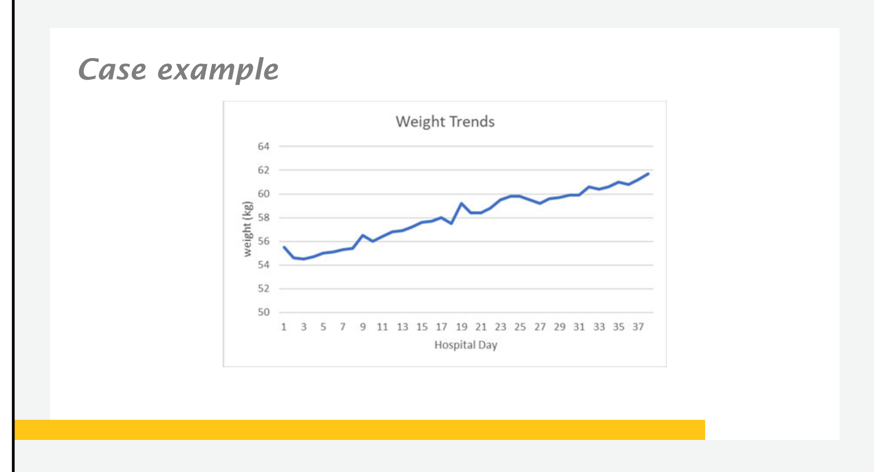
37

Case example: Discharge

- Was no longer spitting out saliva into a cup
- Had re-introduced several foods back
- Was eating staff-selected meals and snacks
- Was taking normal sized bites of food
- Had transitioned some medications from liquid/powder to tablets
- Demonstrated weight restoration and improvements in eating concerns

38

Case example



39

Case example

40

Time for questions and answers…

- Please use the Q&A button – not the chat – to submit your question
- If we don't get to your question, please feel free to send an email to **webinars@rogersbh.org** and we will follow-up with you

41

Where to get additional information…

ARFID news, publications, and resources for providers and families:
https://www.arfidcollaborative.com/welcome

Several ARFID assessment measures and resources available here:
https://mccaed.slam.nhs.uk/professionals/resources/featured-resources/

Massachusetts General Hospital online training in CBT for ARFID:
https://lms.mghcme.org/CBTforARFIDMar2023

42

About the presenters….

Peter DeVries, MD
Medical Director, Adult Inpatient Eating Disorder Recovery

Nicole Stettler, PhD
Executive Clinical Director of Eating Disorder Services

Call or visit:
800-767-4411 | rogersbh.org

ROGERS
Behavioral Health

43