Psychotropic Medication Algorithm for FASD/Prenatal Alcohol Exposure

(Mela et al., 2018, all rights reserved)

Summary for Caregivers

Caregivers have often gone to clinicians to get help with the behaviors of their loved ones with FASD. Until now, clinicians have had no guidelines to assist them in making decisions about prescribing psychiatric medications to individuals with FASD. As a result, many caregivers have expressed concerns that their loved ones are being prescribed too many medications and the medications not always working as anticipated. Caregivers have a lot of questions about how medications differ for individuals with FASD. People often experienced a general lack of FASD-specific considerations from prescribers. A lot of prescribers are also looking for more information on how to prescribe medications for individuals living with FASD because there were not any scientific guidelines.

Medication algorithms are step-by-step instructions that help guide prescribers to make decisions about what medications to try with different kinds of patients. These algorithms exist for a lot of other psychiatric problems, like ADHD, but none of them consider FASD. Because there are brain changes that result from prenatal alcohol exposure, it isn’t fair to assume the other algorithms will work the same for individuals living with FASD.

Researchers set out to develop the first-ever psychiatric medication algorithm specifically for FASD. First, the team did a review of all the research literature on FASD and psychiatric medications. Even though there were not very many studies done, the results were summarized and given to a panel of experts to review. The expert panel was led by a family member of an individual with FASD and consisted of top experts who had experience working with patients with FASD including physicians from psychiatry, pediatrics, and family medicine. There was also an algorithm developer, a pharmacologist, and a research coordinator on the panel.

1. The first step of the algorithm is addressing non-medications factors including social support, sleep, exercise and nutrition. Only after addressing these factors should the algorithm be used.

2. The algorithm has been developed with common clusters of symptoms that require psychiatric medication. The symptom cluster that is most limiting the individual’s independence, ability to function effectively, and quality of life should be the starting point for the prescriber.

3. The expert panel chose to use the inclusive terminology of FASD/prenatal alcohol exposure for the population which the algorithm is meant to apply. Prenatal alcohol exposure, even at low levels, is known to have the potential to cause physical and neurocognitive deficits. Confirmation of prenatal alcohol exposure for an FASD diagnosis can be very difficult in adults.

4. The algorithm is intended to apply to adults. For those under 18 years of age, the experts recommend these guidelines only apply when a full FASD diagnosis is confirmed through a multi-disciplinary diagnostic assessment. The algorithm should not be used for preschool children.

5. The algorithm is in its first version. The plan is to continue to collect information on how it is working and make adjustments over time.
Psychotropic Medication Algorithm for FASD/ND-PAE

Dr. Mansfield Mela et al., 2018 (all rights reserved)
Do not reproduce without permission

https://research-groups.usask.ca/psychological-fasd/psychotropic-medication-algorithm-for-fasd.php

Clusters of Signs & Symptoms

- Hypervigilance
  - Aggression
  - Insomnia
  - Irritability
  - Agitation
  - Anger
  - Anxiety
  - Tension
  - Reduced pain threshold

- Mood swings
  - Excitability
  - Anxiety
  - Depression

- Restless movement
  - Impulsiveness
  - Inattention
  - Executive dysfunction

- Impairments in:
  - Perspective taking
  - Frustration tolerance
  - Social skills
  - Reasoning
  - Reality testing
  - Abstract

- Hyperarousal
- Emotional Regulation
- Hyperactive/Neurocognitive
- Cognitive Inflexibility

Non-Psychotropic Interventions: Social Support/Sleep/Nutrition/Exercise

1st Line

- Adrenergic Agent
  - (Clonidine, Guanfacine)
- Mood stabilizer
  - (Divalproex, Lamotrigine)
- Amphetamine based stimulants
  - (Lisdexan/atomoxetine, Dextroine)
- Atypical neuroleptic
  - (Risperidone)

2nd Line

- SSRI
  - (Fluoxetine, Citalopram, Sertraline)
- SSRI
  - (Fluoxetine, Citalopram, Sertraline)
- Other stimulants
  - (Methylphenidate, Atomoxetine, Bupropion)
- Atypical neuroleptic
  - (Olanzapine, Aripiprazole)

Adjunct

Consider Recommendations from Emerging Field Section

Important Notes:
1 - This group of medications should not be used with preschool children and should only be used with children in consultation with child psychiatry.
2 - The studies showing evidence for Citalopram came before the new warnings of QTc problems. The experts recommend that Escitalopram be considered favorably ahead of Citalopram.
3 - The Adjunct section is only for adults and should not be used with children.

If you are a prescriber seeing patients with FASD/ND-PAE, your feedback on the algorithm is extremely valuable. Please share your experiences with using the algorithm by clicking on the survey link below. This research has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board.

https://www.surveymonkey.ca/r/FASD_Medication_Algorithm