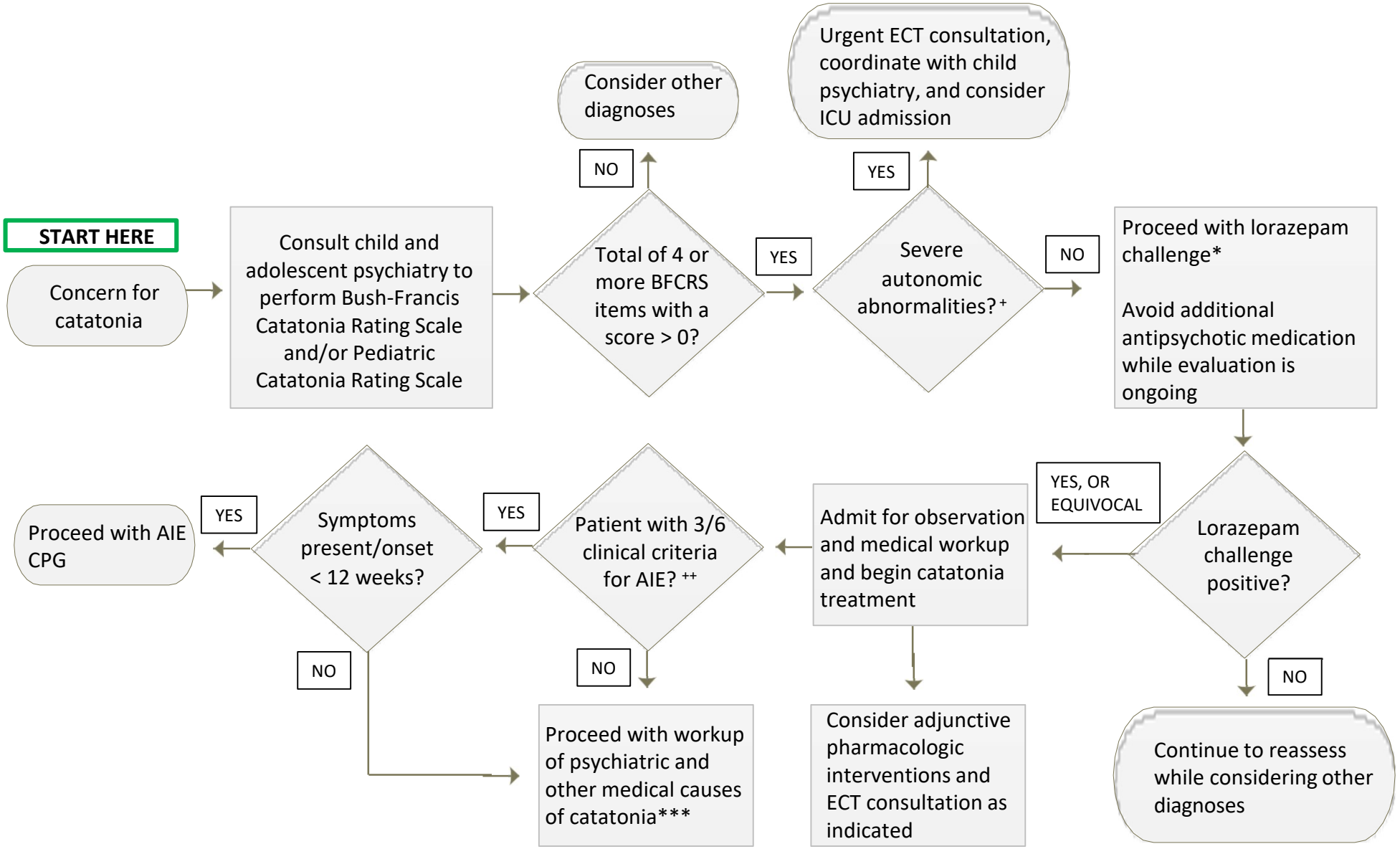
Catatonia

Clinical Practice Guideline

Monroe Carell Jr. Children's Hospital at Vanderbilt



Note that this guideline does not consider individual patient situations and does not substitute for clinical judgment.

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LORAZEPAM CHALLENGE*

Prepare for lorazepam challenge

- Nursing confirms oxygen, suction, emergency medication sheet is at bedside
- Primary team and/or CAP-CL team available at bedside to assess response
- VS q4h, continuous pulse ox if RASS≤-2

Lorazepam challenge, first dose:

- IV (preferred): 0.05 mg/kg slow push over 2-5 min; max dose of 2 mg/dose
- IM/Oral: 0.1 mg / kg; max dose of 2 mg/dose

Rescue medication in case of respiratory depression

- Flumazenil: 0.01 mg/kg PRN; max dose of 0.2 mg

Reassessment within 30 minutes:

- CAP or other trained provider repeats catatonia screening assessment (BFCRS with pediatric symptom modifiers)
- Nursing performs RASS to assess level of consciousness

Outcome

- Positive challenge if ≥ 50% reduction in BFCRS score
- If negative challenge but still suspect catatonia, consider Repeat Lorazepam Challenge**

REPEAT LORAZEPAM CHALLENGE**

Hypoactive or hyperactive catatonia?

HYPOACTIVE → **After lorazepam challenge** Repeat 1 mg lorazepam dose every 30 to 60 minutes if there is no worsening of RASS score

HYPERACTIVE → **After lorazepam challenge** Repeat 1 mg lorazepam dose every 30 to 60 minutes until the patient scores a RASS of -1

Rescreen at least daily for catatonia symptoms and RASS

Dose escalation ≥ 25% per child and adolescent psychiatry recommendations

DEFINITION OF AUTONOMIC ABNORMALIITES +

Vital sign instability not attributable to an identified infectious source or an alternative autoimmune/ inflammatory process:

- Temperature >/= 101 F
- New persistent or intermittent hypertension >/= 95% for height and weight
- Severe bradycardia/tachycardia
- Respiratory pattern that impairs adequate oxygenation/ventilation

Any of the above criteria (in absence of an alternative source) raises concern for autonomic instability. Please use real-time clinical judgement of vital sign changes/instability to determine need for escalation of care, rapid response, and/or need for urgent/emergent Child and Adolescent Psychiatry consultation.

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CLINICAL CRITERIA FOR AIE[++]

1. Abnormal psychiatric behavior or cognitive dysfunction
2. Speech dysfunction (pressured speech, verbal reduction, mutism)
3. Seizures
4. Movement disorder, dyskinesia
5. Decreased level of consciousness
6. Autonomic instability (more than one set of vitals, more than one vital sign involved)

MEDICAL WORKUP OF CATATONIA***

Labs

- ANA with reflex ENA/DNA
- Anti-thyroid peroxidase antibodies
- Anti-thyroglobulin antibodies
- CBC with differential
- CMP
- CRP
- ESR
- MOG antibodies
- Urinalysis
- Urine drug screen

Other

- Psychiatry to perform regular Bush-Francis Catatonia Rating Scale (BFCRS) and/or Pediatric Catatonia Rating Scale

Consults

- Rheumatology
- Neurology
- Psychiatry
- *ID if fever and CSF pleocytosis and/or MRI concern*

Imaging/Procedures

- EEG (length to be determined by neurology)
- MRI brain with and without contrast

- Vital signs every 4 hours

Encourage discussion between primary team and Psychiatry team regarding spacing vitals overnight to promote adequate sleep if clinically improving and therefore anticipating discharge home in the next 24hrs or if awaiting transfer to inpatient psychiatric facility.

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References

Smith, J. R., York, T., Hart, S., Patel, A., Kreth, H. L., Spencer, K., Grizzle, K. B., Wilson, J. E., Pagano, L., Zaim, N., & Fuchs, C. (2024). The Development of a Pediatric Catatonia Clinical Roadmap for Clinical Care at Vanderbilt University Medical Center. Journal of the Academy of Consultation-Liaison Psychiatry. ISSN 2667-2960. https://doi.org/10.1016/j.jaclp.2024.08.003

Luccarelli J., Clauss J., York T., Baldwin I., Vandekar S., McGonigle T., Fricchione G., Fuchs C., Smith J. R. (under review). Exploring the Trajectory of Catatonia in Neurodiverse and Neurotypical Pediatric Hospitalizations: A Multicenter Longitudinal Analysis. *General Hospital Psychiatry. https://pmc.ncbi.nlm.nih.gov/articles/PMC11178013/*

Rogers JP, Oldham MA, Fricchione G, Northoff G, Ellen Wilson J, Mann SC, et al. Evidence-based consensus guidelines for the management of catatonia: Recommendations from the British Association for Psychopharmacology. J Psychopharmacol. 2023 Apr;37(4):327–69.

Smith JR, York T, Warn S, Borodge D, Pierce DL, Fuchs DC. Another Option for Aggression and Self-Injury, Alternative Benzodiazepines for Catatonia in Profound Autism. Journal of Child and Adolescent Psychopharmacology. 2023 Apr 6;cap.2022.0067.

Smith JR, Baldwin I, York T, Anderson C, McGonigle T, Vandekar S, Wachtel L and Luccarelli J (2023) Alternative psychopharmacologic treatments for pediatric catatonia: a retrospective analysis. Front. Child Adolesc. Psychiatry 2:1208926. doi: 10.3389/frcha.2023.1208926

Espinoza, R. T., & Kellner, C. H. (2022). Electroconvulsive Therapy. The New England journal of medicine, 386(7), 667–672. https://doi.org/10.1056/NEJMra2034954

Luccarelli J, Kalinich M, Fernandez-Robles C, Fricchione G, Beach SR. The Incidence of Catatonia Diagnosis Among Pediatric Patients Discharged From General Hospitals in the United States: A Kids' Inpatient Database Study. Front Psychiatry. 2022 Apr 29;13:878173.

Vaquerizo-Serrano J, Pablo GS de, Singh J, Santosh P. Catatonia in Autism Spectrum Disorders: A Systematic Review and Meta-analysis. European Psychiatry. 2021 Dec 15;1–22.

Walther S, Stegmayer K, Wilson JE, Heckers S. Structure and neural mechanisms of catatonia. Lancet Psychiatry. 2019 Jul;6(7):610–9.

Benarous X, Consoli A, Raffin M, Bodeau N, Giannitelli M, Cohen D, et al. Validation of the Pediatric Catatonia Rating Scale (PCRS). Schizophrenia Research. 2016 Oct;176(2–3):378–86.

Cornic F, Consoli A, Tanguy ML, Bonnot O, Périsse D, Tordjman S, et al. Association of adolescent catatonia with increased mortality and morbidity: evidence from a prospective follow-up study. Schizophr Res. 2009 Sep;113(2–3):233–40.

Beach SR, Gomez-Bernal F, Huffman JC, Fricchione GL. Alternative treatment strategies for catatonia: A systematic review. General Hospital Psychiatry. 2017 Sep 1;48:1–19.

Benarous X, Raffin M, Ferrafiat V, Consoli A, Cohen D. Catatonia in children and adolescents: New perspectives. Schizophrenia Research. 2018 Oct;200:56–67.

Bush G, Fink M, Petrides G, Dowling F, Francis A. Catatonia. I. Rating scale and standardized examination. Acta Psychiatr Scand. 1996 Feb;93(2):129–36.

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