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Session MINI ORAL 09 - A Quick Trip Through the Pediatric Heart Function and Transplant Journey

323. Suboptimal Titration of Heart Failure Medications in Pediatric Patients: Baseline Data from the ACTION Network

📅 April 20, 2023, 4:27 PM - 4:31 PM

📍 Rooms 501-504

Topic:

HEART-Pediatrics-Heart Failure

Presenter

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Disclosures

D.Nandi: Consulting/Advisory Fee; ; CareDx. **C.Chen:** n/a.

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J.Conway: Other; ; Abott, Medical monitor for the Pumpkin Trial.

Abstract or Presentation Description

Purpose As part of quality improvement initiatives in pediatric heart failure, we sought to understand the current state of oral heart failure therapy use and titration in children. Given no formal algorithms to guide or assess such titration in pediatrics, we created a multi-center consensus-driven medical therapy (CDMT) document and measured performance across participating centers within the Advanced Cardiac Therapies Improving Outcomes Network (ACTION).

Methods All sites were invited to provide center-specific guidelines for oral heart failure therapy optimization amongst pediatric patients. These were iteratively harmonized along with AHA/ACC adult guidelines for those ≥ 50 kg to achieve consensus. The CDMT document describes minimum therapeutic dosing for each medication class. Drug class, doses, and weights of those with moderate to severe LV dysfunction (without congenital heart disease) presenting to participating centers were assessed retrospectively at presentation and at 6-months post-presentation. Descriptive statistics were utilized.

Results From January 2020 to November 2021, 96 patients (69% < 50kg) presented to 9 centers. Between baseline to 6-month timepoint, the average

number of drug classes prescribed improved (1.9 to 2.4), but only 3 (3%) of patients achieved consensus goal doses in all three classes (Figure). While beta blocker and ACE-inhibitor were most commonly used, mineralocorticoid antagonist dose had the highest percentage of goal dose achieved. All 3 patients achieving goal doses of all three classes were \geq 50 kg. No hyperkalemia, acute kidney injury, or admission secondary to medication titration were reported in the cohort.

Conclusion There is significant room for improvement in utilization of oral medical therapies for pediatric heart failure. Creating and disseminating CDMT documents and pediatric-specific resources to facilitate optimization may help more patients achieve target dosing and improve outcomes.

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