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2-2023

## Hypertrophic Pyloric Stenosis Protocol: A Single Center Study

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### Recommended Citation

Cruz-Centeno, Nelimar; Fraser, James A. MD; Stewart, Shai MD; Marlor, Derek; Rentea, Rebecca M.; Aguayo, Pablo; Juang, David; Hendrickson, Richard J.; Snyder, Charles L.; St.Peter, Shawn D.; Fraser, Jason D.; and Oyetunji, Tolulope A., "Hypertrophic Pyloric Stenosis Protocol: A Single Center Study" (2023). *Presentations*. 78.

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## Creators

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# Hypertrophic Pyloric Stenosis Protocol: A Single Center Study

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# Disclosures:



- **Nelimar Cruz-Centeno, MD**
- **Nothing to Disclose**

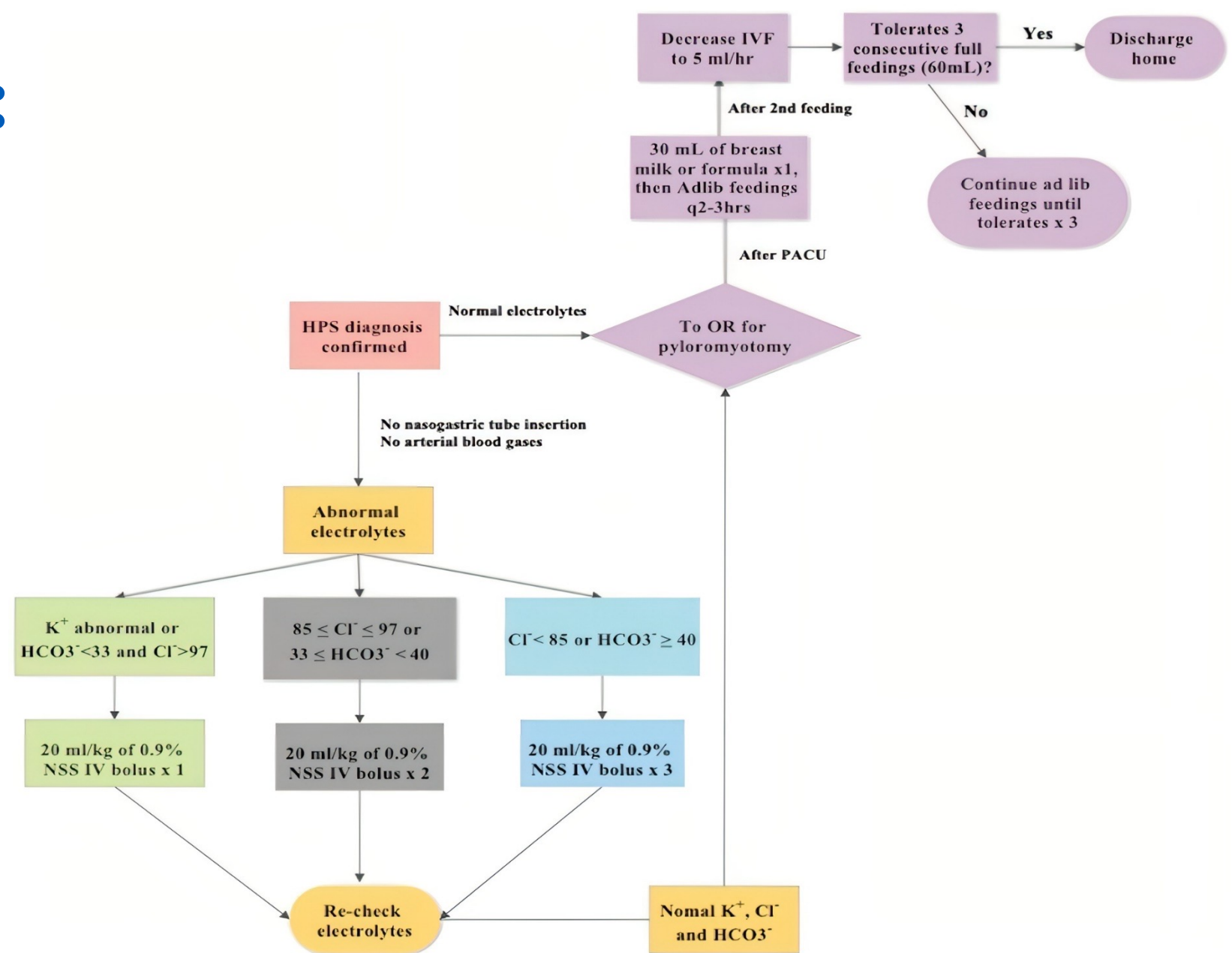
# Introduction:

- Initial management of hypertrophic pyloric stenosis (HPS) is correction of electrolyte disturbances with fluid resuscitation
- Hypochloremic hypokalemic metabolic alkalosis presents significant anesthetic risks of hypoventilation, apnea, and aspiration
- Post-operative management focuses on early feedings
  - Ad lib feeds are associated with faster discharge and time to reach goal feedings
- Our aim was to describe our HPS protocol and outcomes

# Methods:

- Retrospective review of patients diagnosed with HPS from 2016-2020
- Single tertiary care pediatric center
- **Exclusion criteria:**
  - Critically ill secondary to another diagnosis
  - Diagnosed with HPS while admitted to the hospital
  - Missing information from medical record
- **Primary outcome:** postoperative hospital length of stay (LOS)
- **Secondary outcomes:**
  - Total number of preoperative labs drawn
  - Time from surgery to initiation of feeds
  - Time from surgery to full feeds
  - Re-admission and re-operation rate

# HPS Protocol:

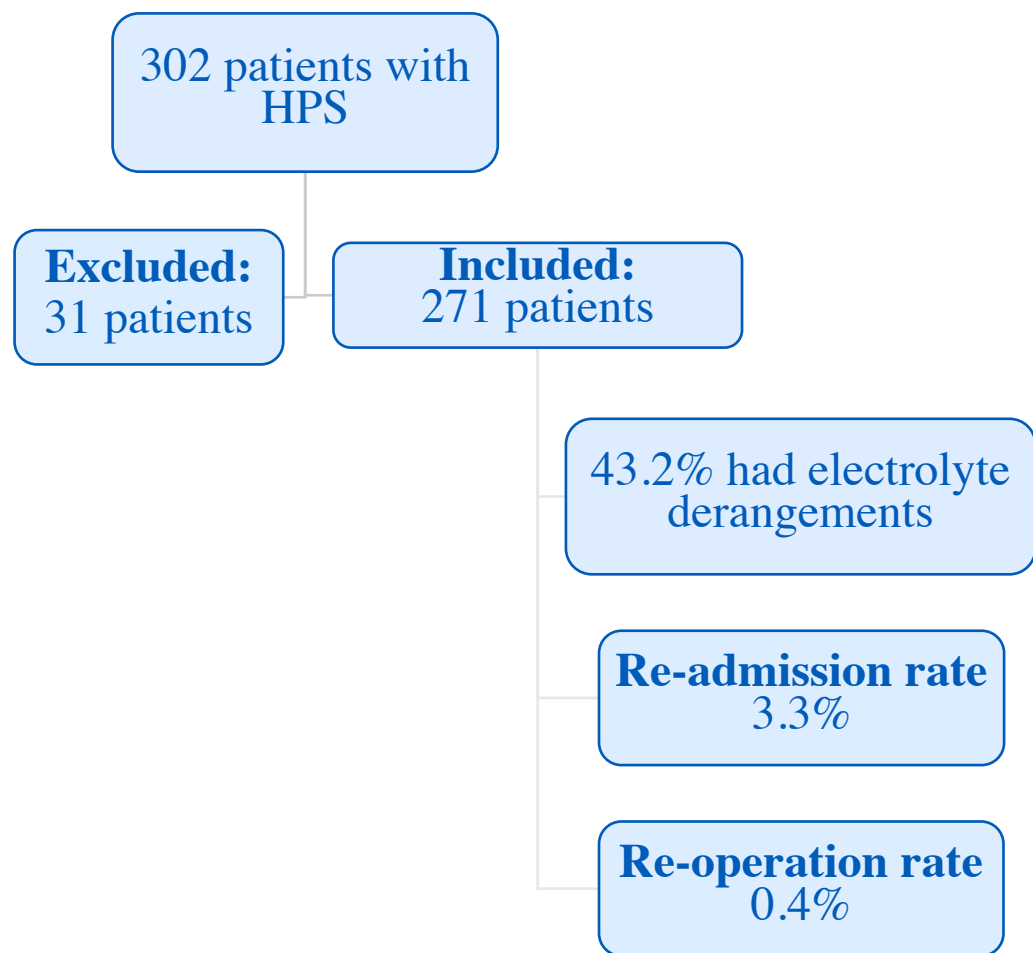


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Fraser JA, Osuchukwu O, Briggs KB, et al. Evaluation of a fluid resuscitation protocol for patients with hypertrophic pyloric stenosis. J Pediatr Surg. 2022;57(10):386-389. doi:10.1016/j.jpedsurg.2021.10.052

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# Results:



Baseline Characteristics	
<b>Gender</b>	
Male	225 (83.0%)
Female	46 (17.0%)
<b>Race</b>	
Caucasian	210 (77.5%)
Other	61 (22.5%)
<b>Median age (weeks)</b>	5 (IQR 3.9,6.5)
<b>Median weight (kg)</b>	3.9 (IQR 3.4,4.4)
Outcome	Median (IQR)
<b>Lab draws</b>	2 (1,2)
<b>Time from arrival to surgery (hours)</b>	19.2 (15.1,24.9)
<b>Time from surgery to first feed (hours)</b>	1.9 (1.2,2.7)
<b>Time from surgery to full feeds (hours)</b>	11.4 (6.2,19.1)
<b>Post operative LOS (hours)</b>	22.2 (9.6,30.6)



# Conclusions:

- This protocol allows infants with HPS to be managed efficiently
  - Few laboratories draws
  - No uncomfortable interventions
- Feeds were initiated expeditiously in the postoperative period ad libitum
- Most patients were discharged on postoperative day one
- Re-admission rate was low