

Midodrine for Vasopressor Weaning: Is the Jury Still Out?

Speaker:

Gretchen Sacha, PharmD, BCCCP

Critical Care Pharmacist

Cleveland Clinic; Cleveland, Ohio

Slides are available on SCCM Connect - Choosing Wisely KEG website

1. Pharmacology and epidemiology of midodrine and use were reviewed
2. Evidence for midodrine use (or not):
 - a. Clinical Studies reviewed. Most were retrospective analyses with conflicting results
 - b. MIDAS RCT – results indicate there is no benefit; no difference in outcomes, including time to vasopressor DC or ICU LOS
 - c. Why the disparate results? Conflicting literature; may not see consistent benefit due to variation in study design; there is no true benefit; dosing is not correct.
3. Midodrine dosing – are we dosing correctly? Duration of effect is only 2-3 hours and we often give every 8 hours
4. When to use midodrine?
 - a. This was variable among the studies
 - b. Midodrine reduced vasopressor duration and ICU LOS when inclusion criteria = clinical stability with stable or decreasing IV vasopressors
 - c. No difference in ICU LOS with inclusion = IV vasopressors for at least 2 hours
 - d. Midas – inclusion criteria included a portion of patients who were in recovery period
5. Transitions of care:
 - a. This is an area of concern. Retrospective eval found over 66% were continued on midodrine upon dc from ICU; retrospective review did show those patients had shorter los in icu. May have been viewed as effective therefore continued.
 - b. 34% dc from hospital on midodrine. CHF hx independently associated with midodrine continuation
 - c. 50% of pts dc from hospital also on antihypertensive – consider this may have been the only way pt could tolerate HF regimen meds?
6. Conclusions
 - a. Disparate and conflicting results
 - b. RCT does not show significant benefit
7. Discussion
 - a. Are others using this drug? Some use in liver pts but general consensus is not seeing much use r/t vasopressor weaning. One response is some peds use following moya moya surgeries and spinal surgeries. Use q6h frequency
 - b. Drug cost may be a consideration as it appears midodrine is relatively expensive
 - c. Any other topics?
 - i. Group should consider volunteering effort on dissemination of the next five. Or survey involving implementation of the original 5. Would be good to get council approval. If there is a group such as this KEG to see what actually happens with the release of the next five.
 - ii. Put together a survey within our group to see who can participate in that effort.

Mar 17 meeting attendees:

Jessica Mercer
Anita Reddy
Anne Rain Brown
Gretchen Sacha
Mais Yacoub
Christina Canfield
Jerry Zimmerman
Matt Tyler
Bryan McGill
Ally Hines
Siu Yan Amy Yeung