Hyperkalemia Management in the Hospital Setting: Success of Online Medical Education at Improving Knowledge, Competence, and Confidence of Cardiologists

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BACKGROUND
Emerging therapies hold promise to improve the treatment of hyperkalemia, especially in patients with concomitant heart failure in the hospital setting, but clinicians are in need of updates on the development of new drugs. We sought to assess baseline knowledge related to emerging treatments for hyperkalemia and determine if online continuing medical education (CME)-and continuing education (CE)-certified activities could improve the clinical knowledge, confidence, and confidence of cardiologists and nurses in this area.

METHODS
2 expert faculty. The activity launched July 27, 2018, and was open for feedback through August 22, 2018.

RESULTS
Continued educational gaps:

- Manage elevated potassium in a hospital setting
- Identify differences in mechanism of action of emerging treatment options compared with traditional options
- Recognize role of new therapies in the management of hyperkalemia

QUESTION 1 RESULTS
18% of cardiologists (n = 85) and 23% of nurses (n = 1357) demonstrated improved knowledge related to differences in mechanism of action of emerging treatment options compared with traditional options.

QUESTION 2 RESULTS
19% of cardiologists (n = 85) and 25% of nurses (n = 1357) reported increased confidence in their ability to treat severe hyperkalemia in a hospitalized patient.

QUESTION 3 RESULTS
40% of cardiologists (n = 85) and 25% of nurses (n = 1357) demonstrated improved knowledge related to role of new therapies in the management of hyperkalemia.

CONCLUSION
This study demonstrates the success of online, video-based education in improving knowledge, competence, and confidence of cardiologists and nurses related to emerging treatments for hyperkalemia and their potential use in the hospital setting.

ACKNOWLEDGMENTS
This CME-certified activity was supported by an independent educational grant from AstraZeneca. For more information, contact Amy Levin, Director of Clinical Strategy, at alevin@medscape.net

SELF-EFFICACY RESULTS
45% of cardiologists and 25% of nurses reported increased confidence in their ability to treat severe hyperkalemia in a hospitalized patient after participating in the CME/CE activity.

AGGREGATED RESULTS
Self-efficacy: How confident are you about your ability to treat severe hyperkalemia in a hospitalized patient?

Q: Which of the following best describes the role of patiromer and ZS-9 in managing hyperkalemia?

- A) They eliminate K+ from the body
- B) They decrease K+ intake
- C) They reduce K+ absorption
- D) They increase K+ excretion

Correct answer: A

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Q: Which of the following is a likely reason for the rapid onset of action of sodium zirconium cyclosilicate (ZS-9) compared with the onset of action of patiromer or sodium polystyrene sulfonate (SPS)?

- A) ZS-9 is absorbed more quickly than patiromer
- B) ZS-9 is emptied more quickly than patiromer
- C) ZS-9 is released more quickly than patiromer
- D) ZS-9 is cleared more quickly than patiromer

Correct answer: A

Q: A 46-year-old male patient hospitalized with end-stage chronic kidney disease (CKD) has a nonhemolyzed serum potassium (K+) level of 6.9 mEq/L. A previous nonhemolyzed K+ reading obtained a few hours earlier was 6.1 mEq/L. Dialysis is not an option. Which of the following is the most appropriate treatment option?

- A) Oral potassium-binding resin
- B) Intravenous potassium-binding resin
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