

Title:

Trends in Direct Oral Anticoagulant Management in Patients Undergoing Cardiac Implantable Electronic Device Procedures

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Session Title:

Direct Oral Anticoagulant Management in Patients Undergoing Cardiac Implantable Electronic Device Procedures

Slot:

F 16: Friday, 28 July 2017: 2:30 PM-3:45 PM

Scheduled Time:

2:30 PM

Keywords:

cardiac implantable electronic device (CIED), cardiology and direct oral anticoagulant (DOAC)

References:

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Abstract Summary:

In many parts of the world, there are no consensus guidelines regarding direct oral anticoagulant (DOAC) management for cardiac implantable electronic device (CIED) procedures. How have providers decided to manage DOACs in this setting, and has our management changed over time with more experience prescribing DOACs?

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Describe existing research and recommendations in regard to the periprocedural management of DOACs surrounding CIED procedures.	Description of the DOAC medications, including information on their onset of action, duration, and half-life
Evaluate trends in the periprocedural management of DOACs surrounding CIED procedures, and any changes through the years.	Discussion of the existing recommendations regarding the periprocedural management of DOACs
	Explanation of our study objectives, methods, and results
	Comparison of results to existing literature and recommendations on DOAC management in the periprocedural period

Abstract Text:

Purpose: Guidelines on how to manage DOACs in the periprocedural setting are necessary for patient safety; yet, in the United States and many areas of the world, there are currently no consensus guidelines that address this topic. This represents an opportunity for nursing science and leadership to standardize care and improve patient outcomes.

Methods: To evaluate DOAC management strategies in the periprocedural setting, we performed a retrospective chart review of all adult patients taking DOACs at the time of CIED procedures at our three hospital facilities from January 2012-June 2016. We analyzed frequency data regarding the number of days that the DOAC was held before and after the procedure, and if bridging with heparin was utilized. Data trends were assessed for any changes over the years as we have gained more experience with DOACs. We also analyzed for any trends associated with age, gender, location, patient comorbidities, concurrent medications, and calculated bleeding and thrombotic risk scores (HASBLED, CHA2DS2-VASc).

Results: Our study had a total of 309 qualifying cases. We found that the average number of days that the DOAC was held before the procedure was 2.2 days and the average number of days that the DOAC was held after the procedure was 1.5 days. This number did not vary widely by age, gender, location, patient comorbidities, concurrent medications, calculated bleeding and thrombotic risk scores (HASBLED, CHA2DS2-VASc), or across the different years of the study. Bridging with heparin occurred in 8.3% of cases.

Conclusion: Overall, our results show that providers manage DOACs in a fairly consistent manner without consensus guidelines. Given that DOACs are expected to eventually become the most commonly used oral anticoagulants and the majority of institutions do not have standardized protocols in place to address their perioperative management, we would recommend that professional societies develop consensus guidelines on how best to manage DOACs in the periprocedural setting to standardize care and improve patient outcomes (Flake et al., 2015; Oktay, 2015).