documentation were rarely submitted. As FDA continues to investigate this potential safety signal, we value receiving information directly from health care professionals. We encourage clinicians to consider quantitative nicotine or cotinine testing when evaluating patients with e-cigarette–associated seizures and to submit case reports with testing results to the Safety Reporting Portal.

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Food and Drug Administration.

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The Influence of Serial ECG on the Test Characteristics of the Sgarbossa Criteria in Ventricular Paced Rhythms

We commend Dodd et al[1] for selecting the clinically important outcome of occlusion myocardial infarction to examine the utility of the modified Sgarbossa criteria in patients with ventricular paced rhythm. The limitations of this study have been discussed well, but we would like to make an additional point. There was no standardized protocol for preangiography serial ECG (unsurprising, considering the multiple centers and retrospective study design); ECG was ostensibly performed at the discretion of the treating clinician. Dodd et al[1] evaluated all preangiography ECGs performed while the patient was symptomatic. The authors acknowledge the value of serial ECGs for the diagnosis of occlusion myocardial infarction but, unfortunately, do not include a comparison of the number of ECGs performed per subject in each groups. However, referring to the Table, the patients with occlusion myocardial infarction reported chest pain at a rate significantly higher than the no-occlusion myocardial infarction patients (95% vs 57%, respectively).

Chest pain, depending on the pattern, can be a typical acute coronary syndrome symptom, and, presumably, subjects in the occlusion myocardial infarction group might have also presented more frequently with a relatively more concerning symptom pattern (ie, severe, constant, or stuttering).[2] This presentation could have led to higher suspicion for acute coronary syndrome in the occlusion myocardial infarction group than in the no-occlusion myocardial infarction group. If there is high clinical suspicion for acute coronary syndrome and the initial ECG is not diagnostic but the patient remains symptomatic, guidelines recommend that serial ECGs be performed over 15- to 30-minute intervals during the first

hour.[3] Therefore, the occlusion myocardial infarction group might have been more likely to undergo more frequent serial ECGs than the no-occlusion myocardial infarction group, introducing the risk of a detection bias. Serial ECGs might improve the sensitivity of ECG for occlusion myocardial infarction, so more frequent ECGs in the occlusion myocardial infarction group could have helped identify more occlusion myocardial infarctions in that group.[4,5] On the other hand, less frequent serial ECGs in the less symptomatic no-occlusion myocardial infarction group might have failed to detect dynamic ST deviation and, therefore, lowered the likelihood of modified Sgarbossa criteria or the original Sgarbossa Criteria being false positive for occlusion myocardial infarction. An imbalance in the number of serial ECGs between the occlusion myocardial infarction and no-occlusion myocardial infarction groups might influence the test characteristics of both modified Sgarbossa criteria and original Sgarbossa Criteria by deflating sensitivity and inflating specificity to some degree.

The authors presume that "there is no reason to believe that any of [the study's] limitations disproportionately affected the diagnostic accuracy of either the modified Sgarbossa criteria or the original Sgarbossa Criteria." This is also likely to be true of the possible imbalance in the number of ECGs per subject between the groups. However, a validation study with a defined serial ECG protocol in both the groups or an adjustment for the number of ECGs per subject (as a possible covariate) would be necessary to determine whether serial ECG differentially affects the diagnostic accuracy of modified Sgarbossa criteria and original Sgarbossa Criteria for occlusion myocardial infarction in the setting of ventricular paced rhythm.

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Accidental Ocular Rocuronium Exposure

To the Editor:

Rocuronium is a commonly used paralytic in rapid sequence intubation in the emergency department (ED).[1,2] Despite familiarity with this critical drug, little is known about the expected course and appropriate management of accidental exposures. We report a case of local symptoms after accidental exposure to rocuronium in the eye.

A healthy 31-year-old woman was working in an urban academic ED. While drawing up 100 mg of rocuronium bromide, the lid on one vial opened (Figure), and she accidentally splashed rocuronium into her left eye. The maximum contamination of the eye would have been 50 mg though the exact amount was unknown. She immediately went to the nearest eyewash station and irrigated her eye for 5 minutes. Afterwards, she presented to Employee Health, who sent her to the ED, where she arrived 30 minutes after exposure.

The patient complained of "heaviness" of her left eyelid and mild blurry vision. She denied any respiratory symptoms, extremity weakness, headache, double vision, eye pain, or sensory deficits. On examination, she had a partial forehead crease flattening with eyebrow raise on her left side. Resistance to eye-opening was slightly weaker on the left eye compared to the right. The patient had a symmetric smile; pupils were equal, round, and reactive to light. She had no lag, weakness, or nystagmus with extraocular eye movements. The remainder of her neurologic examination was unremarkable, as were her cardiac, pulmonary, and abdominal examinations.

The National Capital Poison Control was contacted for guidance, but they had no reports of mucosal exposure of rocuronium. The patient was observed in the ED and, after 2 hours, had complete resolution of her symptoms and