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Rocuronium and Malignant Hyperthermia

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Rocuronium and Malignant Hyperthermia

We thank Drs. Schuster and Johannsen for their interest in these complex cases and concur that there were several possible etiologies for the described reactions. We addressed these in the discussion portion of our report.

Although the use of genetic or caffeine–halothane contracture testing would have been ideal, the tests were not considered feasible to perform in the community hospital where these patients were treated. Genetic testing would not have changed the course of therapy, as both patients experienced resolution of hyperthermia on discontinuation of the suspected offending agent. The caffeine–halothane contracture test has a number of associated constraints, including limited availability of testing centers in the United States and requirements for patients to travel to these centers for testing. Both tests may burden patients with substantial costs, estimated at \$800–\$4000 for genetic testing and at least \$6000 for the caffeine–halothane contracture test.¹

We agree that previously described instances of malignant hyperthermia (MH) associated with nondepolarizing neuromuscular blockers could have been explained by other offending agents; we discussed this point in our report. We appreciate and share Drs. Schuster and Johannsen's concerns regarding the potential clinical implications of the development of MH in association with nondepolarizing neuromuscular blockers, particularly in patients known to be susceptible to such a reaction.

Case reports are open to interpretation by readers, who are responsible for considering the rare and perplexing circumstances of the cases, the limitations of the reports, and the implications of the reports on practice. It is the responsibility of authors to help maximize medication safety by sharing these cases, which will better allow health care providers to respond appropriately if they encounter similar scenarios in clinical practice.

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References

1. Malignant Hyperthermia Association of the United States. MHAUS guidelines. *Testing for malignant hyperthermia susceptibility: how do I counsel my patients?* http://medical.mhaus.org/pubdata/PDFs/dx_testing_options.pdf (accessed 2012 Aug 19).