

MIND TO MIND

Creative writing that explores the abstract side of our profession and our lives

Stephen T. Harvey, M.D., Editor

Dantrolene Available in China for Malignant Hyperthermia Treatment

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Every culture around the world has unique folktales and fables, and such traditions and arts have the potential to influence humanity positively. A classical masterpiece, *Journey to the West*, tells the adventures of the brilliant and powerful protagonist called the Monkey King. On one harrowing quest on his pursuit for redemption across the Flaming Mountains, he comes across a vast field of evil scorching fires. He eventually realizes that the only way to extinguish the evil fires is by borrowing the Palm-Leaf Fan from the Spider Queen. Equipped with this mighty fan, the Monkey King was finally able to put out the evil fires and continue on his journey to the west. As mighty as he was, even the omnipotent Monkey King needed a magical weapon to win a special battle. This story parallels modern day heroes such as Chinese anesthesiologists who have been fighting the fires of malignant hyperthermia (MH) for decades without dantrolene as their Palm-Leaf Fan until October 2020. Outcomes from MH in China have undoubtedly been suboptimal, and even the true mortality is unknown. Data from the nonprofit academic organization China MH Emergency Assistance Group showed that a reported total of 136 MH events occurred between 1985 and October 2020 and had a mortality rate of 55.9%, a similar range reported in the pre-dantrolene era in developed countries. In recent years, about 200 million cases of general anesthesia are performed worldwide, and 15% of these are annually done in China. As expected, many MH events occurred and were not optimally managed without dantrolene because of the high cost and low utilization of dantrolene kept for immediately accessible in anesthesia sites. However, with the introduction of dantrolene to China in October 2020, we anticipate the mortality of MH events to dramatically reduce and become comparable to that of

Accepted for publication August 24, 2021. Published online first on October 7, 2021. From the Department of Anesthesiology, Peking University Third Hospital, Beijing, China. puthmzk@hsc.pku.edu.cn.

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Europe and the United States (approximately less than 10%). This is undoubtedly a milestone for Chinese anesthesiologists. Globally, many patients still do not have access to dantrolene. We are hopeful that those anesthesiologists will soon be able to use dantrolene to treat MH events and provide the best care to patients. The drawing expresses the excitement of anesthesiologists in China. The skeletal muscle fibers are embedded with the faces of monsters to represent hyper-metabolism and thermogenesis, characterized by significant elevations in carbon dioxide production and hyperthermia resulting from vigorous contractions of skeletal muscles triggered by volatile anesthetics or succinylcholine. The anesthesiologist (the Monkey King) uses dantrolene (the magical Palm-Leaf Fan) to defeat the evil fires of MH. This movement requires the collaborative efforts of anesthesiologists, the leadership of anesthesia societies, and private pharmaceutical companies and government regulators to make dantrolene more readily available. We wish for every Monkey King in the world to finally have the ability to wield the magical fan and become better equipped to conquer evil fires all around the globe.



Acknowledgments

The authors sincerely thank Dr. Tam Thanh-Ngoc Sun, Department of Anesthesiology, McGovern Medical School, University of Texas, Health Science Center at Houston, for her language editing and voluble suggestions.