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Myasthenic Crisis-Induced Takotsubo Cardiomyopathy: What to Know

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Myasthenia gravis (MG) is an autoimmune disorder in which antibodies are formed against post-synaptic nicotinic acetylcholine receptors that leads to impeded muscle contraction, and commonly affects the oculomotor muscles. MG can be complicated by myasthenic crisis (MC), a life-threatening exacerbation of myasthenic weakness that can lead to respiratory depression and possibly even death. Takotsubo cardiomyopathy (TTC) is a dilated cardiomyopathy that can mimic a myocardial infarction and causes reversible systolic dysfunction By themselves, MC has a mortality of 4% and TTC is approximately 2.4%. A review of 32 known cases of MC-associated TTC revealed a mortality of 15.6%, suggesting an unfortunate synergistic effect that significantly increases mortality. Here, we review the current cases and clinical patterns of 32 known cases of MC-associated TTC.