Midazolam is a water-soluble benzodiazepine imide that has been used in recent years to manage status epilepticus (SE). We describe four patients with SE refractory to conventional treatment, whose seizures were controlled with midazolam administered intramuscularly in two cases and intravenously in the remaining two. Given the pharmacokinetic traits of this drug, the intramuscular route offers great advantages. Midazolam also produces fewer side effects than do other benzodiazepines, suggesting the possibility of its use as a first line treatment for SE and frequent epileptic seizures.