



Patients Are Not Guinea Pigs

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Sir: We sincerely thank Dr. McMahan and co-authors for reporting this tragic case following an egregious medical misadventure.¹ A "health care provider" (HCP) injected a liter of homemade, partially-frozen normal saline with 10% glycerol, into abdominal and flank soft tissues of an elderly woman with chronic renal failure, who subsequently suffered days of vomiting and diarrhea, then acute renal failure, and slow partial recovery despite good care. What a grossly irresponsible act!

Injectable ice slurry is not cleared by the FDA for anything, and is not commercially available. Presumably, this HCP tried to copy our original 2020 report of subcutaneous fat loss from local ice slurry injection in swine.² Sterile, stable, injectable ice slurries are not simple to make, and we wonder how it was done—did the HCP use a kitchen blender, as if making a daiquiri? Was the slurry really sterile? Was it delivered rapidly, pushing a liter of salty fluid into an elderly lady with chronic renal failure? Was the ice content of the supposed slurry even capable of inducing fat loss? Fat loss by cryolipolysis takes a few months; McMahan et al do not mention whether this patient had notable fat loss during the 3 months she was followed up.

A renal biopsy performed 2 weeks after the ice-slurry treatment revealed acute interstitial nephritis with nonspecific inflammatory infiltrate. What precipitated her acute renal failure? The authors raise the question of whether rhabdomyolysis played a role; dehydration and electrolyte imbalance are probable after days of diarrhea and vomiting (despite the reported admission labs); fluid overload and steroid-induced diabetes were side effects of her hospital treatments, all occurring before the renal biopsy. Saline and glycerol are chemically nontoxic substances with a long history of safe parenteral use when delivered correctly.

This case report begs the question of what constitutes safe and effective use of such ice slurries in patients with

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DISCLOSURE

R.R. Anderson and L. Garibyan are inventors of injectable ice slurry for fat reduction, which led to intellectual property owned by our employer Mass General Brigham, licensed to Arctic Fox Biomedical, a company developing the technology. R.R. Anderson and L. Garibyan are faculty of Harvard Medical School and have no relationship to Arctic Fox Biomedical.

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