Shortly after her arrival to the emergency department, she was noted to have findings of compartment syndrome of her forearm at the site of the dextrose extravasation. She was evaluated by plastic surgery and taken to the operating room for emergent fasciotomy” Chinn and Colella (2016).

Abstract:

CASE: A 57-year-old woman was found at home by paramedics to be hypoglycemic with altered mental status. She had multiple attempts at IV access and eventually a 22G IV was established and D50 was infused into her right forearm. Extravasation of the dextrose was noted after approximately 12 g of the medication was infused. She was given a dose of glucagon intramuscularly and her mental status improved. Shortly after her arrival to the emergency department, she was noted to have findings of compartment syndrome of her forearm at the site of the dextrose extravasation. She was evaluated by plastic surgery and taken to the operating room for emergent fasciotomy. She recovered well from the operation.

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DISCUSSION: D50 is well known to cause phlebitis and local skin necrosis as a complication. This case illustrates the danger of compartment syndrome after D50 extravasation. It is the first documented case of prehospital dextrose extravasation leading to compartment syndrome. There may be safer alternatives to D50 administration and providers must be acutely aware to monitor for D50 infusion complications.

Reference:

Dextrose extravasation identified as the cause of forearm compartment syndrome

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Thank you to our partners for supporting IVTEAM