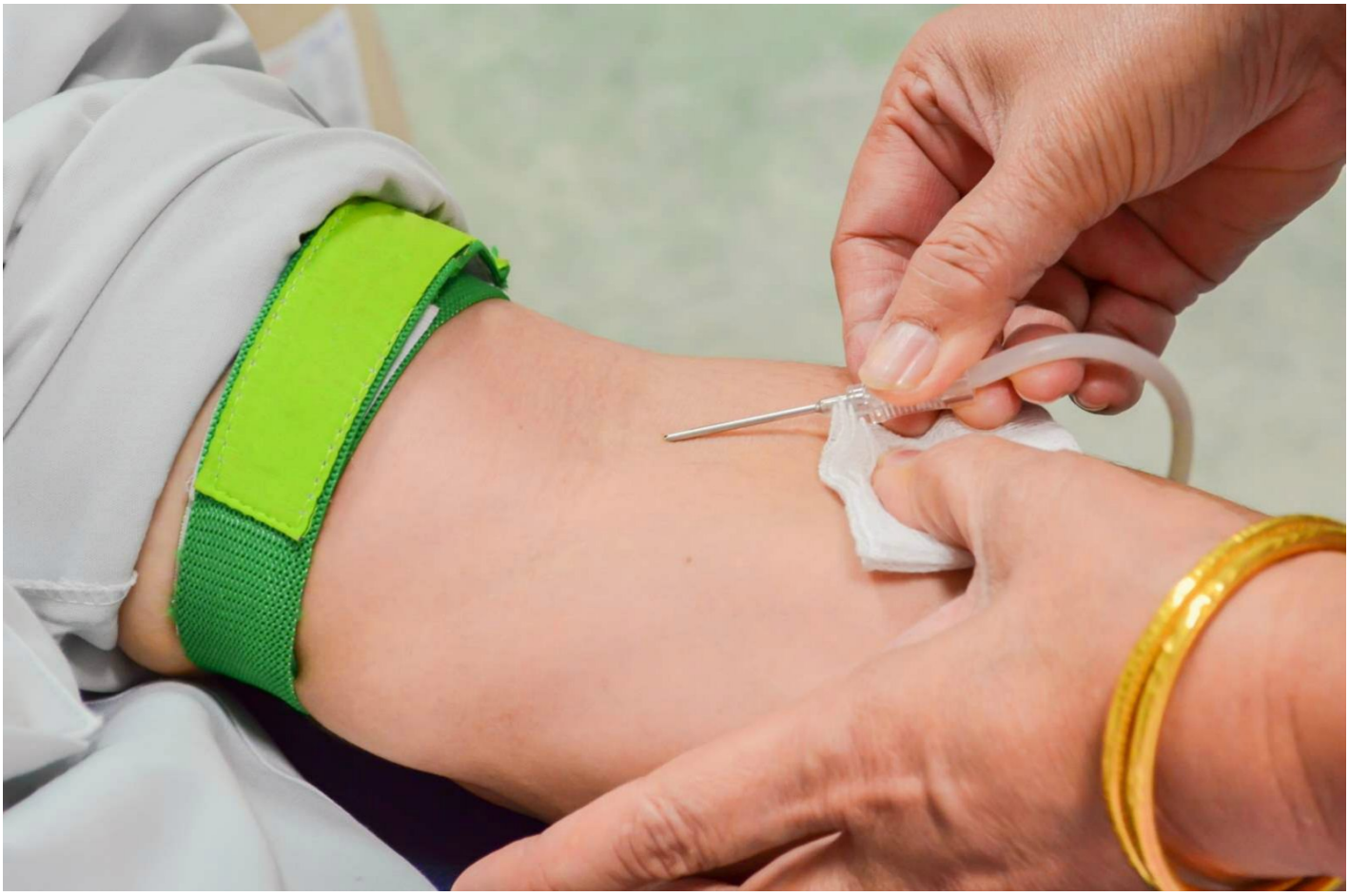
EZ-IO: Using The Bone When The Veins Won't Do

University of Texas Health Science Center San Antonio



More than six million emergency room patients annually cannot have intravenous (IV) therapy started successfully when they need it. In situations in which the patients' veins collapse due to shock, low blood pressure, cardiac arrest or other complications, IVs prove extremely difficult to start, often resulting in no access or significant delay in access to the blood vessels, and subsequently thousands of deaths every year.

The intraosseous space, where bone marrow resides, is a specialized area of the human body's vascular system where blood flow is rapid and continues even during shock. Drugs and fluids injected into the bone marrow reach the central circulation at least as quickly as those administered through standard IV access. While the medical community has long recognized that bone marrow acts as a non-collapsible vein through which any drug or fluid can be rapidly and safely administered, it has, until recently, been faced with the problem of how to safely penetrate the hard part of the adult bone with a catheter to gain access to the bone marrow.

Vidacare in conjunction with The University of Texas Health Science Center – San Antonio developed the EZ-IO product

system. The system consists of a small, battery-powered intraosseous (IO) driver and needle set that provides fast, safe and controllable intraosseous access, safely penetrating through the bone in seconds.

> *This unique design alerts the user when the needle has entered the intraosseous space providing greater control, even in the most challenging cases.*

Studies have shown that insertion using the EZ-IO® system usually takes less than 10 seconds, while IV insertion takes an average of eight minutes.

Technologically advanced and designed for maximum patient tolerance, the EZ-IO AD for adults was the first power-driven FDA- cleared IO access product and has been successfully used in the field since late 2004. Similarly, the EZ-IO PD for pediatric patients, recently cleared by the FDA, was designed with a modified needle for safe access into smaller patients and is now available throughout the United States.

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