brain damage and death. The overall mortality of convulsive status epilepticus is up to 35 percent.

[0148] Intravenous access with a large bore needle/catheter must be established to administer anticonvulsant medications. These include a benzodiazepine followed by phenytoin and/or phenobarbitol for immediate seizure control and prevention of further seizures. There are no satisfactory oral, rectal, or intramuscular medications that will control status epilepticus.

[0149] The problem facing clinicians and paramedics treating patients with status epilepticus is the difficulty establishing venous access. Without adequate venous lines none of the effective anticonvulsants can be given. During seizures the violent shaking makes accessing a satisfactory vein difficult. Often after the line is established, further shaking dislodges the IV or causes it to infiltrate.

[0150] Further, caregivers are at great risk of puncturing themselves with a needle when attempting to establish venous access in a patient during a seizure. Through no fault of their own, seizing patients, by jerking and thrashing around, turn the safest procedure into a terrifying venture. Doctors, nurses, and paramedics work in mortal fear of contracting AIDS and hepatitis through an inadvertent puncture with a contaminated needle.

[0151] In an attempt to solve the venous access problem, emergency physicians and intensivists have turned to establishing a central line (intravenous catheter placed in a large central vein such as the subclavian or femoral vein). However, with this method, even under ideal conditions, there is an increased incidence of serious side effects such as pneumothorax, hemothorax, inadvertent puncture of a major artery, infection, venous thrombosis, and embolus. In the case of a patient with status epilepticus, this method becomes increasingly difficult and dangerous for all of the above-mentioned reasons. Therefore, most doctors are reluctant to even attempt a central line until seizures have ceased.

[0152] Dialysis patients who often come to the emergency room in life threatening situations such as pulmonary edema (water on the lungs) or high potassium leading to cardiac arrest. These patients typically have troublesome or nonexistent veins. The IO access may give these patients hope for a better quality of live and decrease their mortality.

[0153] Drug overdose victims, often comatose, generally require immediate IV access to give antidotes and life saving medications such as Narcan. These patients usually have difficult venous access due to long term abuse of their veins. IO access may give these patients an alternate route for delivery of medications and fluids while improving the safety of the healthcare workers.

[0154] Trauma victims and attempted suicide patients, often in shock due to blood loss, may also require swift replacement of fluids to save vital organs. Because of the shock condition (decreased blood pressure), veins collapse and are often impossible to find. IO access may save precious minutes for paramedics and trauma surgeons responsible for their care.

[0155] Although the present disclosure and its advantages have been described in detail, it should be understood that various changes, substitutions and alternations can be made herein without departing from the spirit and scope of the invention as defined by the following claims.

What is claimed is:

1. A vascular access kit comprising:

components for accessing a peripheral vein; and

components for accessing bone marrow at a selected intraosseous site.

2. The kit of claim 1 wherein the components for accessing the bone marrow further comprise a powered driver and an intraosseous needle set.

3. The kit of claim 1 wherein the components for accessing the bone marrow further comprise a manual driver and an intraosseous needle set.

4. The kit of claim 1 further comprising:

a cradle with a driver releasably disposed therein; and

the driver operable to insert an intraosseous device at the selected intraosseous site.

5. The kit of claim 1 further comprising multiple sections operable to releasably hold in an organized sequence an intravenous access device and an intraosseous access device.

6. The kit of claim 1 wherein the bag further comprises at least one divider operable to releasably hold in an organized sequence an intravenous access device and an intraosseous access device.

7. A kit for accessing the vascular system of a patient comprising:

an intravenous (IV) access device and an intraosseous (IO) access device;

a securing device attached to an interior surface of the kit; and

the securing device sized to releasably engage a powered driver used to provide intraosseous access to the vascular system of a patient.

8. A kit according to claim 7, further comprising the securing device presenting the powered driver to a user in an easy to see manner.

9. A kit according to claim 8, further comprising:

the securing device allowing a user to easily pick up the powered driver;

a divider disposed in the kit with an IO device releasably engaged with one surface of the divider; and

the IO device operable to be releasably engaged with the powered driver.

10. A kit according to claim 9, further comprising the securing device allowing a user to easily and intuitively replace the powered driver into the kit for subsequent use.

11. A kit for accessing the vascular system of a patient comprising:

an intravenous (IV) access device and an intraosseous (IO) access device;

a securing device attached to an interior surface of the kit;

the cradle sized to releasably engage a manual driver used to provide intraosseous access to the vascular system of a patient.

12. A kit according to claim 11, further comprising the securing device presenting the manual driver to a user in an easy to see manner.