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I have recently read the case report “A complication of the use of an intra-osseous needle” by Helm, Goller, Hackenbroch and Hossfeld published online in your Emergency Medicine Journal June 2, 2011. This is a well written and informative article that discusses the uses and potential complications of intra-osseous infusion.

I am concerned about the actual FAST1 device that was used in this case report. This was an older version that still provided a removal tool to remove the metal portal (“end of the needle”). Pyng, the manufacturer of the FAST1 redesigned the FAST1 over 4 years ago because of a limited number of reports of the portal being left in the sternum during the removal procedure. The redesigned FAST1 strengthened the portal-plastic tubing connection and did away with the need for a removal tool. The last of the FAST1’s with the removal tool was shipped over 3 years ago. Specifically, these devices were last shipped in AUG 2008. The newly designed devices without the removal tool began to be shipped in NOV 2007. Additionally, the product has a stated shelf life or expiration date 2 years after manufacturing.

Therefore the device that was reported in this case study was over 3 years old. Some of the reasons that the FAST1 has a 2 year shelf life are sterility and a possible degradation of components exposed to the potentially harsh climates (extremes of heat, cold and humidity) that the military routinely trains and operates in.

As a retired military physician I am well aware of the military logistics systems, cost constraints and the need sometimes to “use what you have”. This brings up the more significant issue of patient safety and in this case, training safety. Almost all medical materiel, from the FAST1 to medications, IV fluids and various electronic monitoring, treatment and diagnostic devices have a designated shelf life or expiration date. These dates are determined by detailed studies and regulatory practices. Use of any medical materiel beyond its expiration date for any reason poses a serious risk to the patient or in this case training volunteers. Regardless of where one practices medicine from a “brick and mortar” medical center or hospital to austere frontline care it is imperative to check and examine the expiration dates of all medical materiel on a routine basis, from receipt through storage and prior to use with a patient to ensure quality care and patient safety.

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