

PREOPERATIVE DIAGNOSIS: ,Grade 1 compound fracture, right mid-shaft radius and ulna with complete displacement and shortening.,POSTOPERATIVE DIAGNOSIS: , Grade 1 compound fracture, right mid-shaft radius and ulna with complete displacement and shortening.,OPERATIONS:;,1. Irrigation and debridement of skin subcutaneous tissues, muscle, and bone, right forearm.,2. Open reduction, right both bone forearm fracture with placement of long-arm cast.,COMPLICATIONS:;, None.,TOURNIQUET: , None.,ESTIMATED BLOOD LOSS:;, 25 mL.,ANESTHESIA: , General.,INDICATIONS: ,The patient suffered injury at which time he fell over a concrete bench. He landed mostly on the right arm. He noted some bleeding at the time of the injury and a small puncture wound. He was taken to the emergency room and diagnosed a compound both bone forearm fracture, and based on this, he was seen for malalignment.,He was indicated the above-noted procedure. This procedure as well as alternatives of this procedure was discussed at length with the patient's parents and they understood them well. Risks and benefits were also discussed. Risks such as bleeding, infection, damage to blood vessels, damage to nerve roots, need for further surgeries, chronic pain on full range of motion, risk of continued discomfort, risk of need for repeat debridement, risk of need for internal fixation, risk of blood clots, pulmonary embolism, myocardial infarction, and risk of death were discussed. They understood these well. All questions were answered and they signed the consent for procedure as described.,DESCRIPTION OF PROCEDURE:

,The patient was placed on the operating table and general anesthesia was achieved. The right forearm was inspected. There was noted to be a 3-mm puncture-type wound over the volar aspect of the forearm in the middle one-third overlying the radial one-half. There was bleeding in this region. No gross contamination was seen. At this point, under fluoroscopic control, I did attempt to see a fracture. I was unable to do the forearm under the close reduction techniques. At this point, the right upper extremity was then prepped and draped in the usual sterile manner. An incision was made through the puncture wound site extending this proximally and distally. There was noted to be some slight amount of nonviable tissue at the skin edge and debridement was required and performed. I also did perform a light debridement of the nonviable subcutaneous tissue, muscle, and small bony fragments were also removed. These were all completely debrided appropriately and then at this point, a thorough irrigation was performed of the radius, which I communicated through the puncture wound. Both ends were clearly visualized, and thorough irrigation was performed using total of 6 L of antibiotic solution. All nonviable gross contaminated tissue was removed. At this point with the bones in direct visualization, I did reduce the bony ends to anatomic alignment with excellent bony approximation. Proper alignment of tissue and angulation was confirmed.,At this point, under fluoroscopic control confirmed the radius and ulna in anatomic position, which will be completely displaced and shortened previously. The ulna was now also noted to be

in anatomic alignment.,At this point, the region was thoroughly irrigated. Hemostasis confirmed and closure then begun. The skin was reapproximated using 3-0 nylon suture. The visual puncture wound region was left open and this was intact with the depth of the wound down the bone using 1.5-inch Nugauze with iodoform. Sterile dressing applied and a long-arm cast with the forearm in neutral position was applied. X-ray with fluoroscopic evaluation was performed, which confirmed. They maintained excellent bony approximation and the anatomic alignment. The long-arm cast was then completely mature. No complications were encountered throughout the procedure. The patient tolerated the procedure well. The patient was then taken to the recovery room in stable condition.