

Fig. E-1

Anteroposterior (**Fig. E-1A**) and lateral (**Fig. E-1B**) fluoroscopic images of a guidewire inserted into the piriformis fossa.

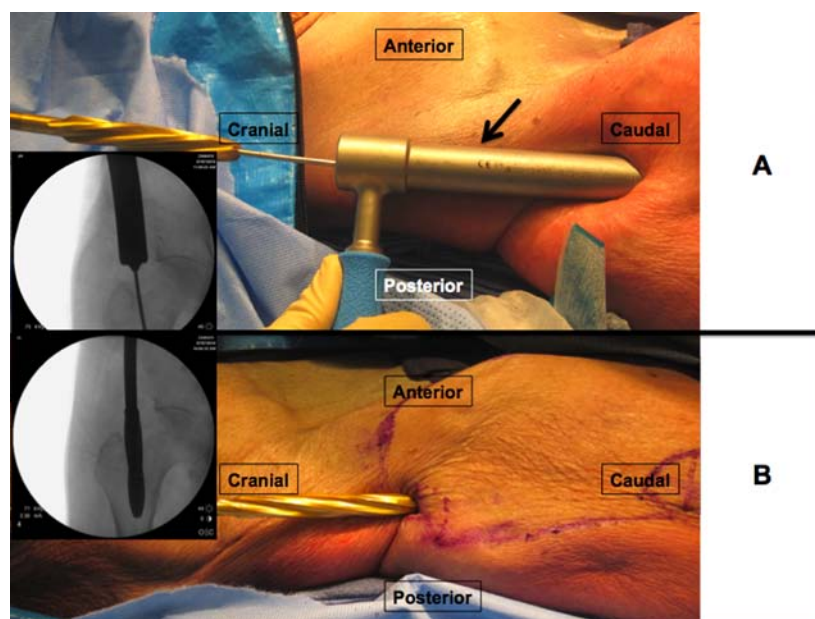


Fig. E-2

Figs. E-2A and E-2B Photographs of two different cadaveric specimens, in the supine position, and anteroposterior fluoroscopic images of the respective proximal part of the femora. Guidewires have been inserted into the proximal part of the femora, and an opening reamer is being passed over the guidewire. A protective sleeve (solid arrow) was used during reaming in the specimen photographed and imaged in **Fig. E-2A**, while reaming was performed without the use of a protective sleeve in the specimen photographed and imaged in **Fig. E-2B**.

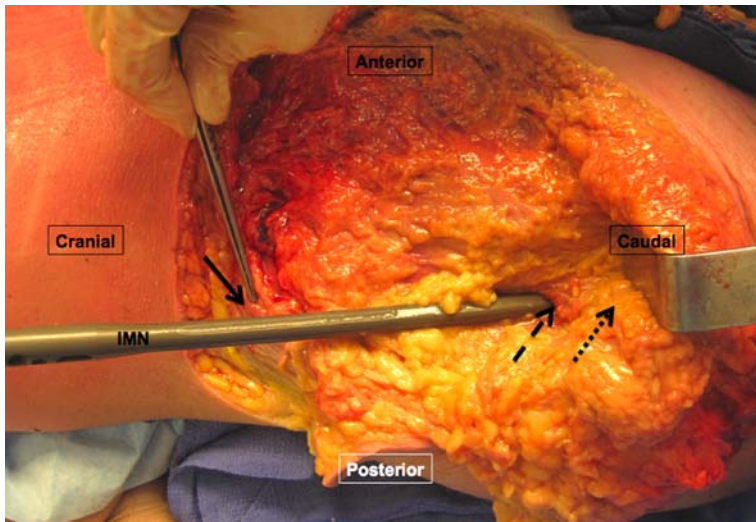


Fig. E-3

Photograph of the most superficial layer of dissection. The skin and subcutaneous tissues have been removed. The subcutaneous “tunnel” of the intramedullary nail (IMN) between the proximal skin incision (solid arrow) and the deep “rent” in the gluteal fascia (dashed arrow) just proximal to the greater trochanter (dotted arrow) can be seen. Most of the IMN path lies lateral or external to the deep tissues of the hip.

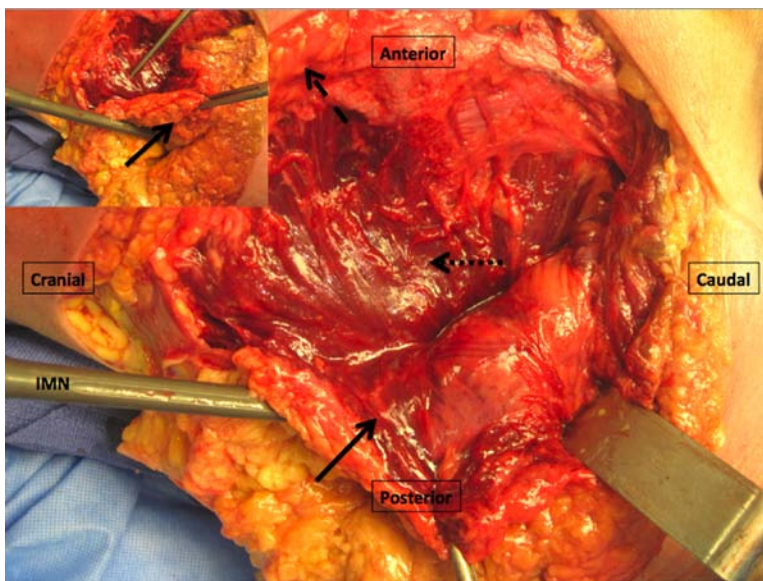


Fig. E-4

Photograph of deeper dissection. The gluteus maximus muscle (solid arrow) has been detached from its iliac origin (dashed arrow) and reflected posteriorly. The underlying gluteus medius muscle is now visible (dotted arrow). The intramedullary nail (IMN) path is always located lateral or external to the gluteus medius muscle. Insert: The path of the IMN is located external or lateral to the proximal portion of the gluteus maximus muscle (solid arrow) until the muscle is pierced more distally, just proximal to the tip of the greater trochanter. The clamp is holding the belly of the gluteus maximus muscle.

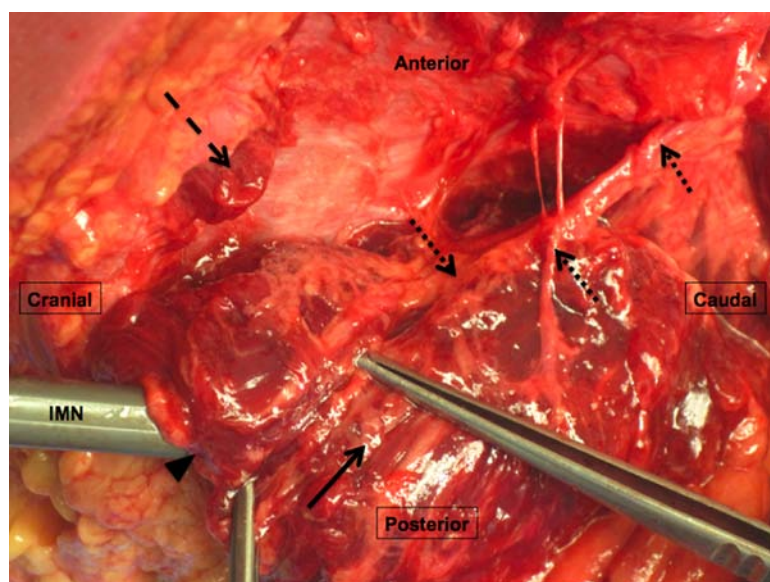


Fig. E-5

Photograph of a deeper dissection. The gluteus medius muscle (solid arrow) has been reflected off its iliac origin (dashed arrow), exposing the trunk of the superior gluteal nerve, running on the deep, or undersurface, of the muscle belly (three dotted arrows). The path of the intramedullary nail (IMN) is external or lateral to the belly of the gluteus medius muscle (arrowhead), and the muscle belly is interposed between the IMN and the superior gluteal nerve.

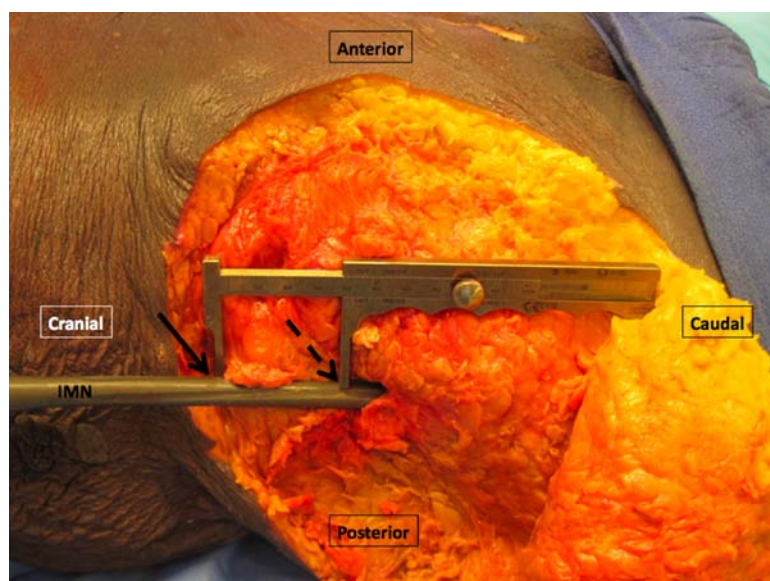


Fig. E-6

Photograph of the most superficial layer of dissection of the proximal and lateral portion of the thigh and posterior region of the hip, in the supine position. The distance between the proximal skin incision (solid arrow) to the deep "rent" in the gluteus maximus fascia (dashed arrow) is determined with a caliper.

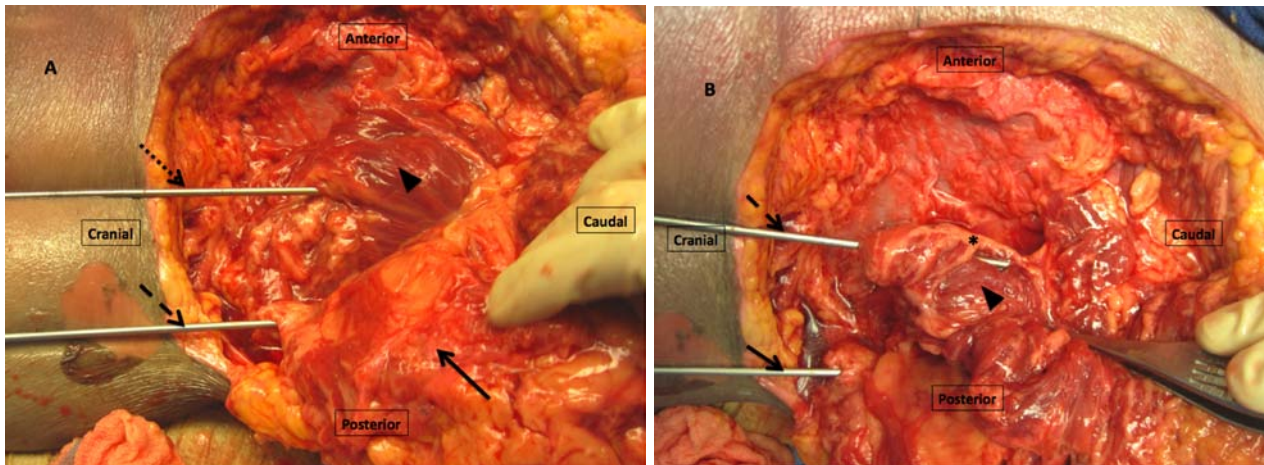


Fig. E-7

Fig. E-7A Photograph of a deeper dissection. The gluteus maximus muscle (solid arrow) has been detached off its origin and reflected posteriorly. Two guidewires were placed: one into the proper on-axis path (dashed arrow), and the other into an erroneous medial path (dotted arrow). With the properly placed guidewire, it always remains lateral to the gluteus medius muscle (arrowhead). **Fig. E-7B** Two guidewires have been placed, and the gluteus medius muscle (arrowhead) has been released from its origin and reflected posteriorly to reveal the superior gluteal nerve (asterisk). One guidewire (solid arrow) is placed in the proper on-axis trajectory, while the other guidewire (dashed arrow) is placed in an erroneous trajectory (with the distal end aimed medial to the correct trajectory). The properly placed guidewire remains lateral to the gluteus medius muscle. When the wire is erroneously directed medially, it penetrates the gluteus medius muscle and could injure the superior gluteal nerve (asterisk).