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Lateral Femoral Cutaneous Nerve Block with an Intravenous Catheter: An Intrapelvic technique

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Lateral femoral cutaneous nerve (LFCN) is a sensory nerve, with its extensive dermatome covering the anterolateral aspect of the thigh. The anatomical knowledge of its extrapelvic courses of the main trunk and its two or more branches immediately below the inguinal ligament (IL) [1-2], explain why the extrapelvic techniques without neural locators (NLs) such as Peripheral Nerve Stimulator (PNS) and Ultrasound (US) devices, are focused on subcutaneous anaesthetic infiltrations in a "fanwise" fashion [3-5], as a field block with volumes up to 15 ml [6]. I would like to present an alternative block without those NL. I usually have performed an intrapelvic approach to block the LFCN as a "single shot" or with cannula for repeated doses. Description of the technique: Local anaesthetic (LA) wheal is made. With an angle of 30-40° to the skin immediately below the IL, medial to the anterior superior iliac spine (ASIS), and in a sagittal plane, a set compound by a loss of resistance (LOR) syringe attached to a disposable 20 G needle (3.5 cm to 4.0 cm long) or a 20 G or 22 G intravenous catheter Nipro® (4.2 cm or 5.0 cm long), is advanced toward the great pelvis. The "end point of the puncture" is determined by two successive resistance losses after has been crossed, the fascia lata and fascia iliaca. With the single needle or venous catheter "*in situ*," and its bevel directed slightly lateral, the LOR syringe is replaced by another syringe with 6-7 ml LA and then injected into the iliac fascial compartment. Whether the purpose is to prolong analgesia of wounds, skin grafts, and surgeries (femur osteotomies, osteosynthesis) on the lateral aspect of the thigh, an intravenous catheter is kept in place; the needle is withdraw at the same time

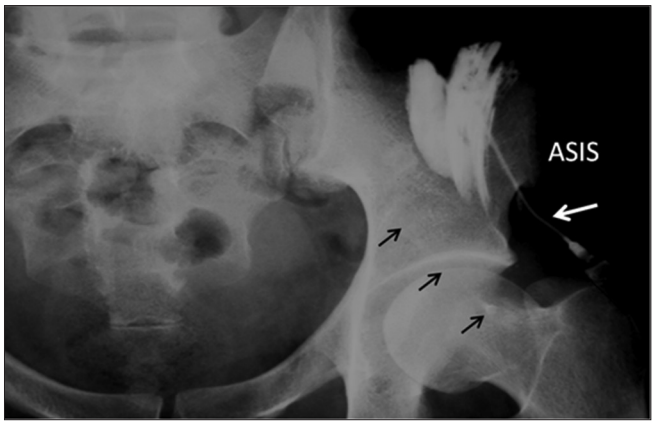

Figure 1: Intrapelvic catheter (white arrow) with contrast spray at the course of the lateral femoral cutaneous nerve (LFCN). Another intravenous cannula (black arrows) next to the femoral nerve is ready for use whether the trauma (e.g., skin graft harvest site) exceeds the outline limits of the LFCN's dermatome.

where the disposable intravenous catheter is advanced into the iliac fascial compartment and the final LA dose injected. This volume is sufficient to block the LFCN as show at the X-ray (Fig. 1) where the spray (3 ml of LA with 4 ml of Iopamiron® 300) is seen over the course of the LFCN. In my view, short catheters 3.5-5.0 cm long, are ideal for these procedures. Pushing these intravenous catheters toward fascial compartments, hardly result in aleatoryies paths, curls and much less kinks. An extension can be connected to these intravenous catheters offering continuous or intermittent analgesia making its management easy and put them

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away from the traumatic areas, specially, in skin donor regions at the anterolateral thigh. In places where anaesthesiologists have no NL, they can perform this LOR technique. In my opinion, the LOR's technique is the true art of the peripheral regional anaesthesia that not requires the essential technology (PNS and US) to found the peripheral nerves location.

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