

Genicular Nerve Block For Chronic Knee Pain: A Different Approach

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INTRODUCTION

- Knee osteoarthritis affects over 33% of adults aged 65+, with rising trends due to aging and obesity
- Current treatments include therapy, medications, and surgery such as total knee arthroplasty (TKA).
- We introduce a different genicular nerve block technique, emphasizing needle trajectory/placement for improved patient comfort.

METHODS

- The patient is positioned supine with a flexed knee (30 degrees).
- Under fluoroscopy, 25-gauge needles are used to target specific nerves (SMGN, SLGN, IMGN) based on anatomical landmarks.
- Iohexol contrast to confirm needle placement, followed by incremental injection of 0.5% bupivacaine to complete the procedure.

CASE REPORT

- A 69-year-old male with osteoarthritis, experiencing constant sharp knee pain worsened by weight-bearing.
- Successful left genicular nerve block procedure reduced VAS score from 6/10 to 0/10.

DISCUSSION

- By avoiding anterior-to-posterior needle trajectory and minimizing contact with the sensitive periosteal surface, our approach significantly reduces procedural pain, improving patient comfort.

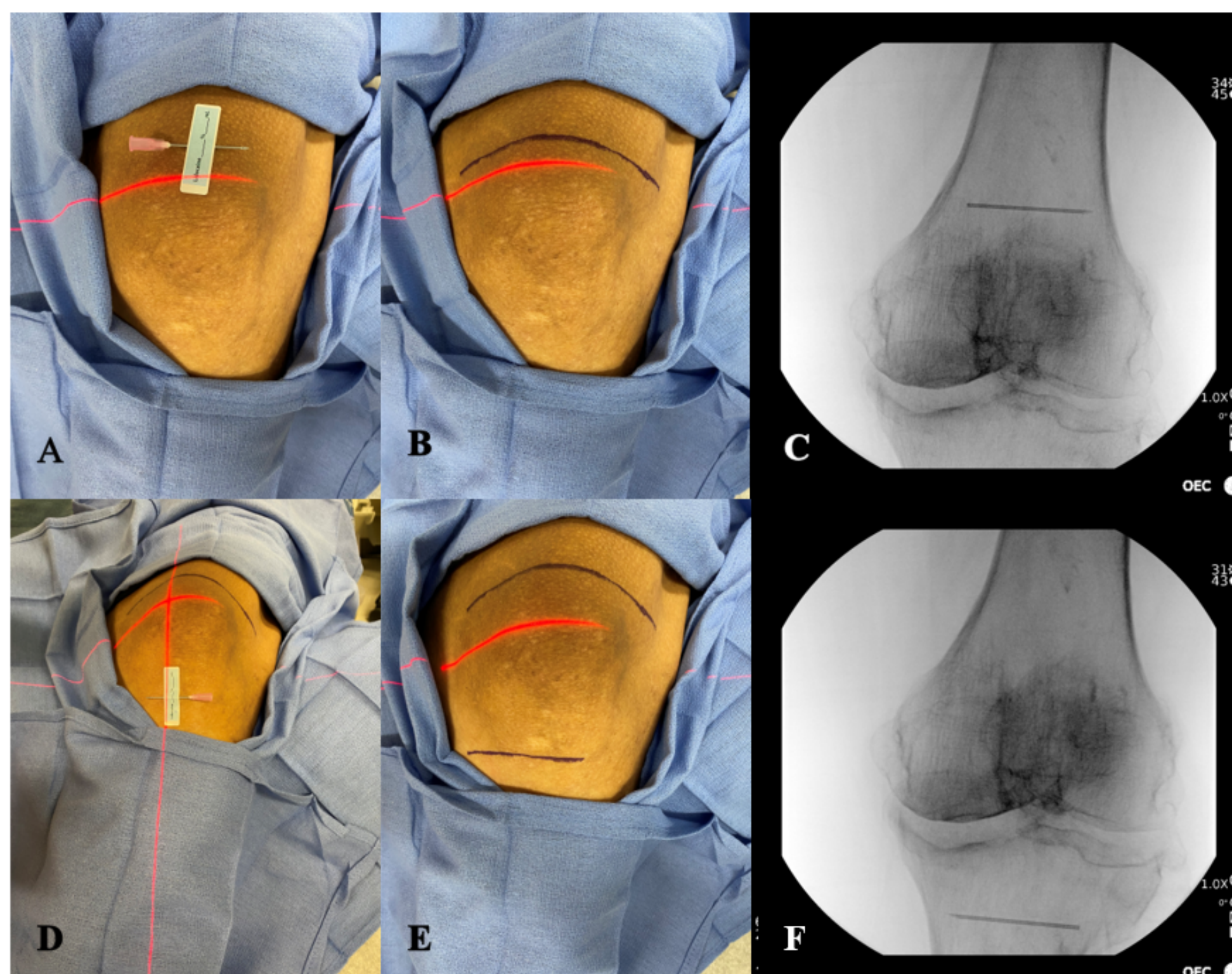


Figure 1. A-C: Initial outline of approximate needle entry points for SMGN and SLGN with an 18-gauge needle under fluoroscopy. D-F: Initial outline of approximate needle entry point for IMGN with an 18-gauge needle under fluoroscopy.

Minimizing needle tip contact with the periosteal surface during genicular nerve block reduces procedural discomfort.



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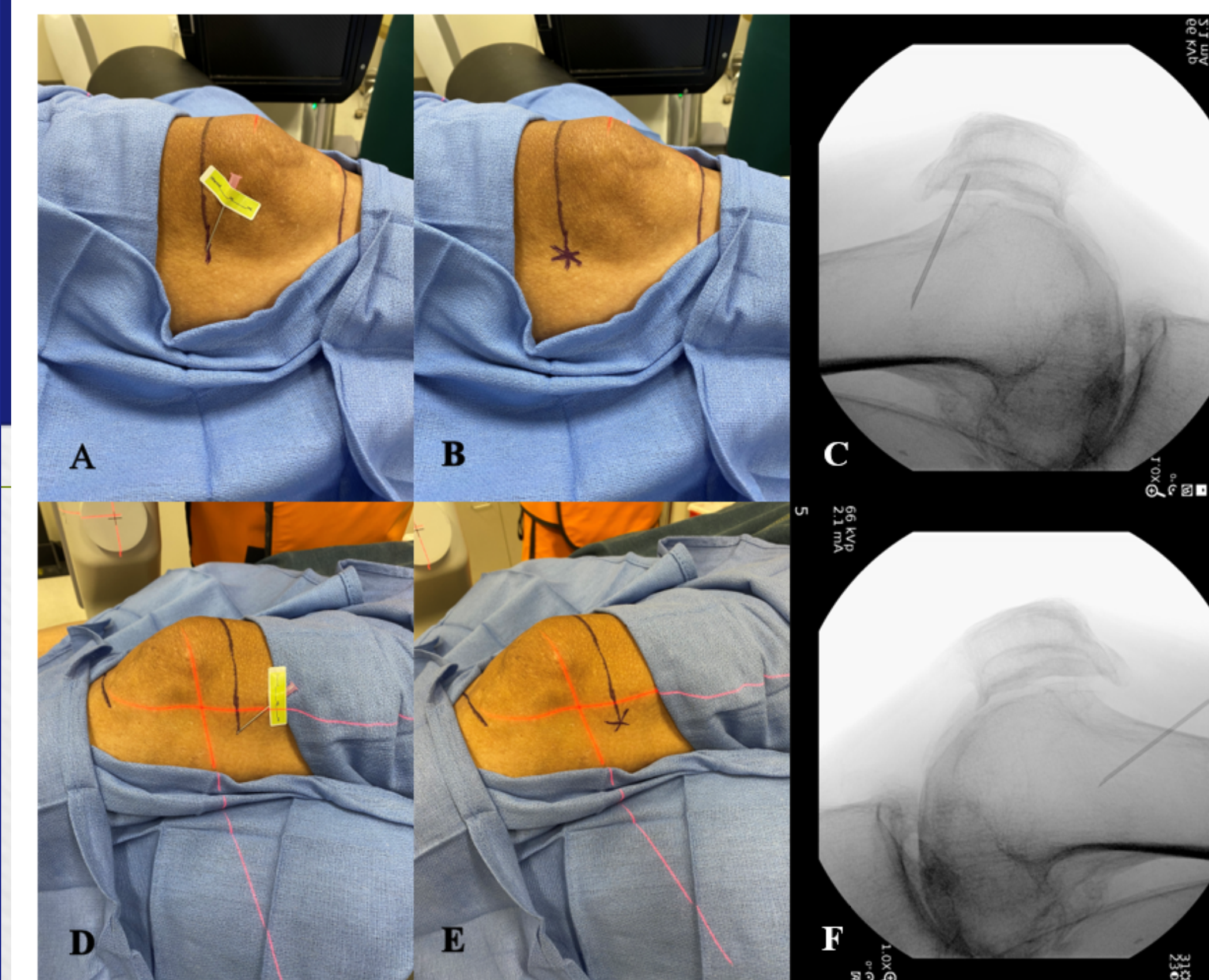


Figure 2. A-C: Outline of approximate needle entry point for SMGN with an 18-gauge needle under fluoroscopy. D-F: Outline of approximate needle entry point for SLGN with an 18-gauge needle under fluoroscopy. This process is repeated for the IMGN.

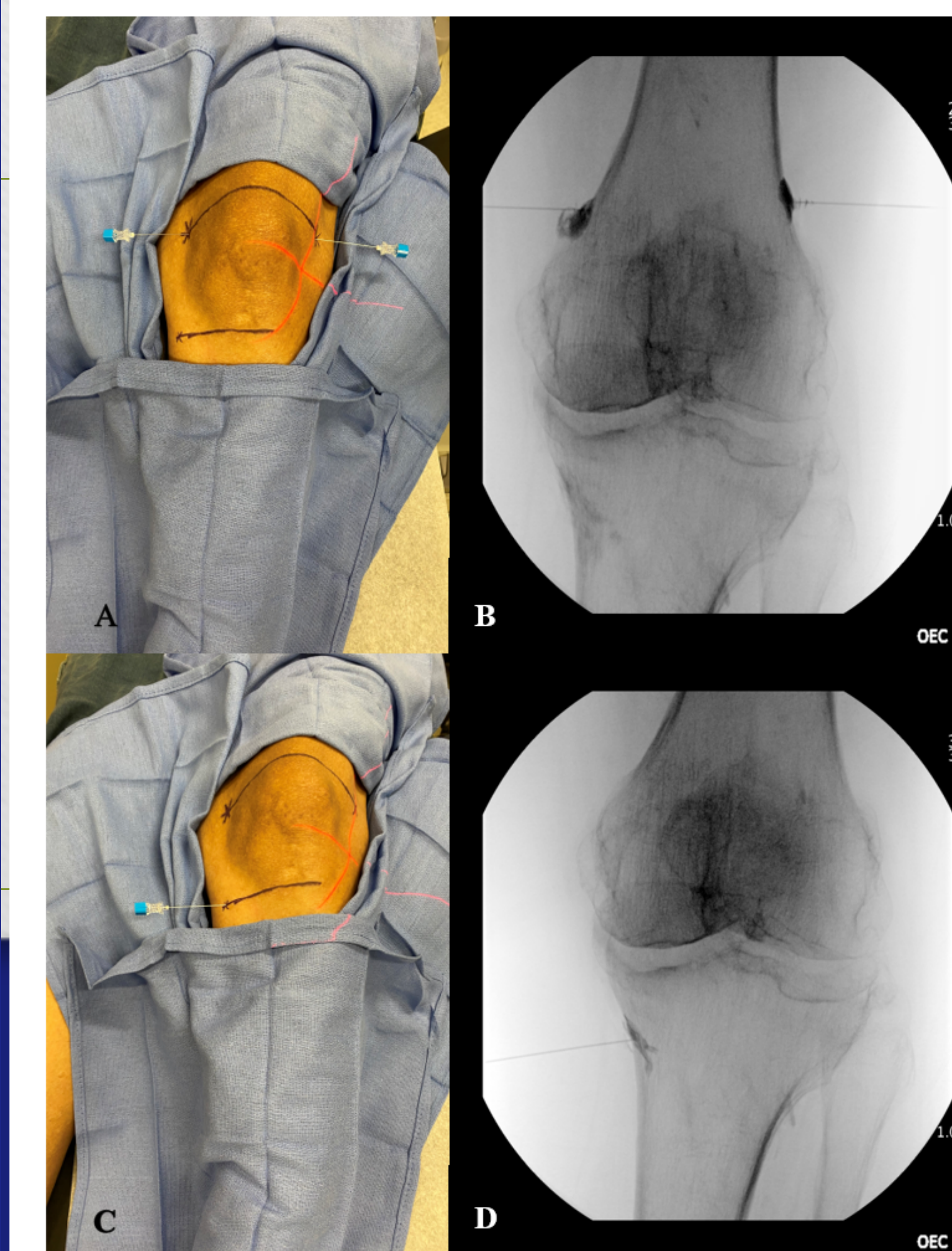


Figure 3. A-B: Contrast injection at the sites of SMGN and SLGN with Quincke needles under fluoroscopy. C-D: Contrast injection at the site of IMGN with a Quincke needle under fluoroscopy.