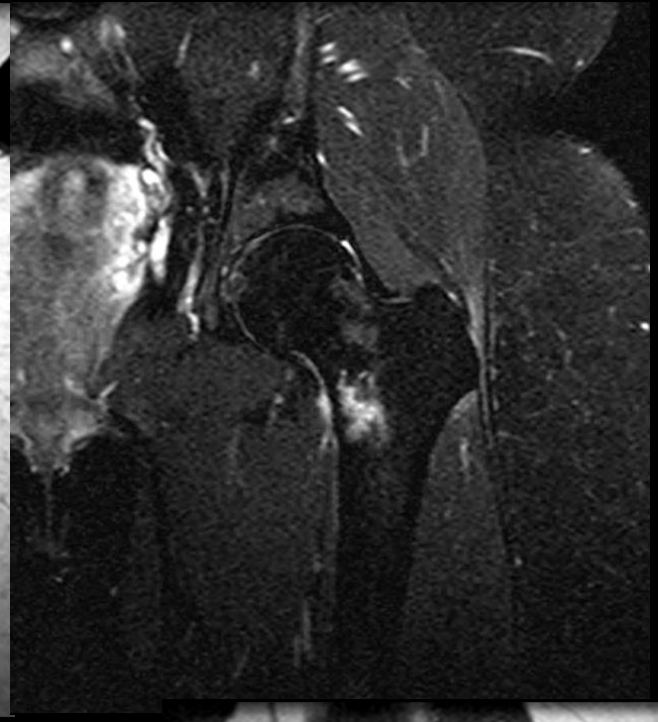
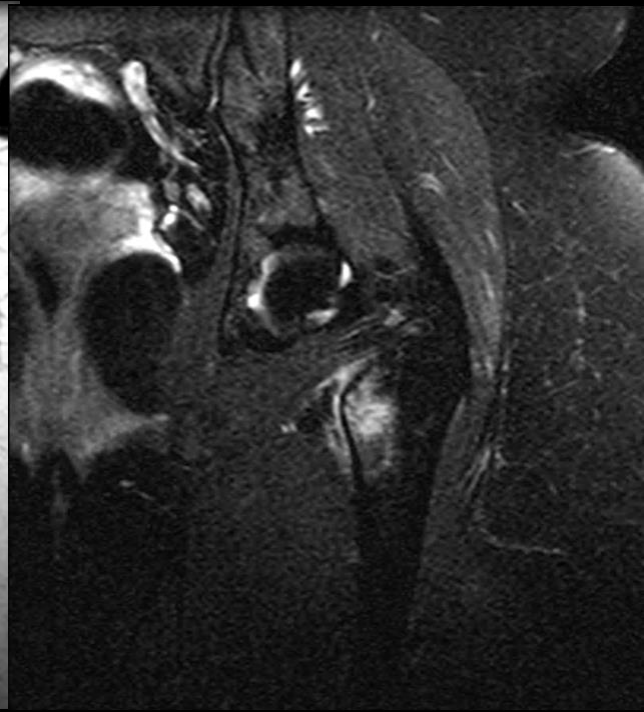
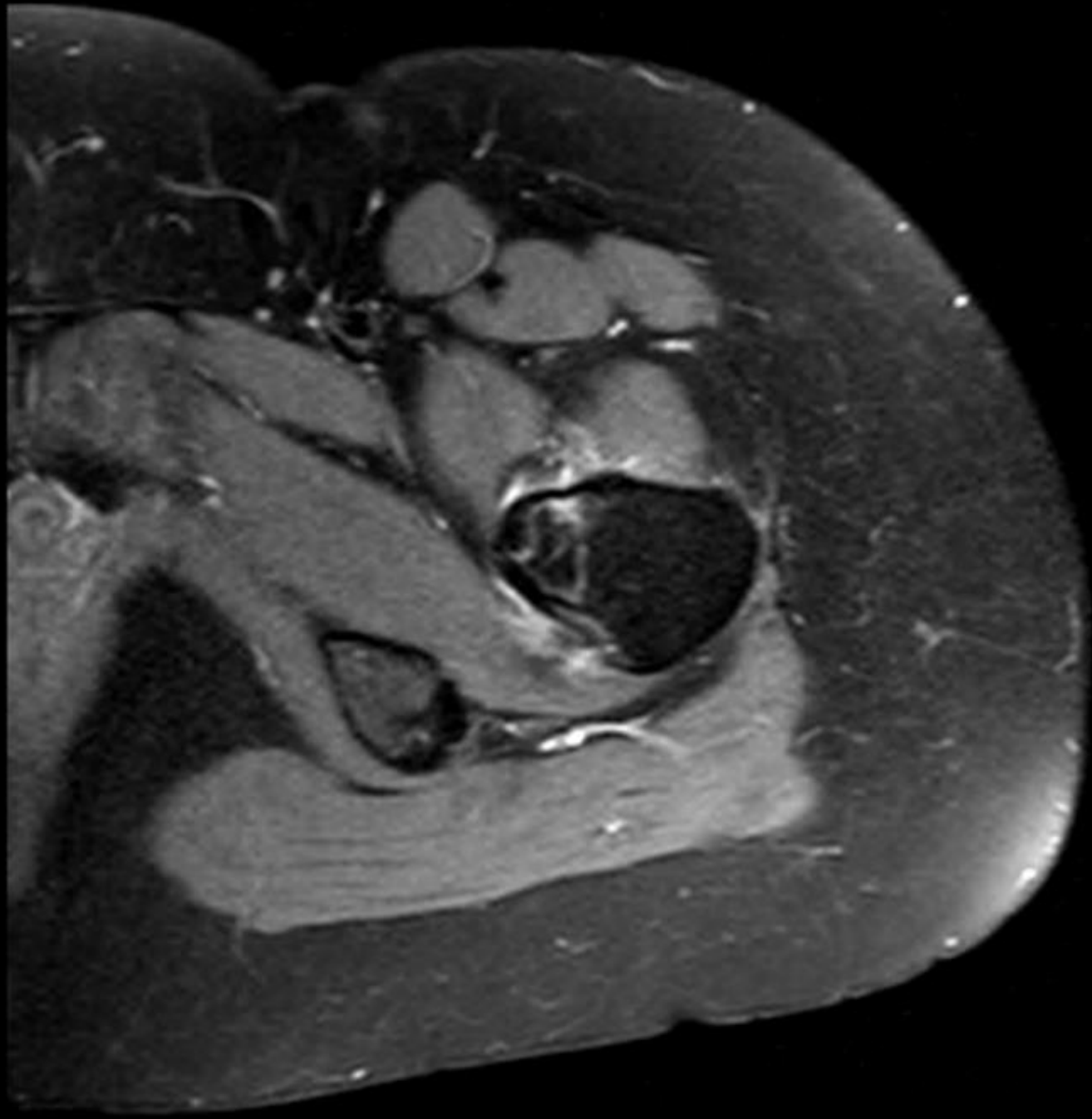
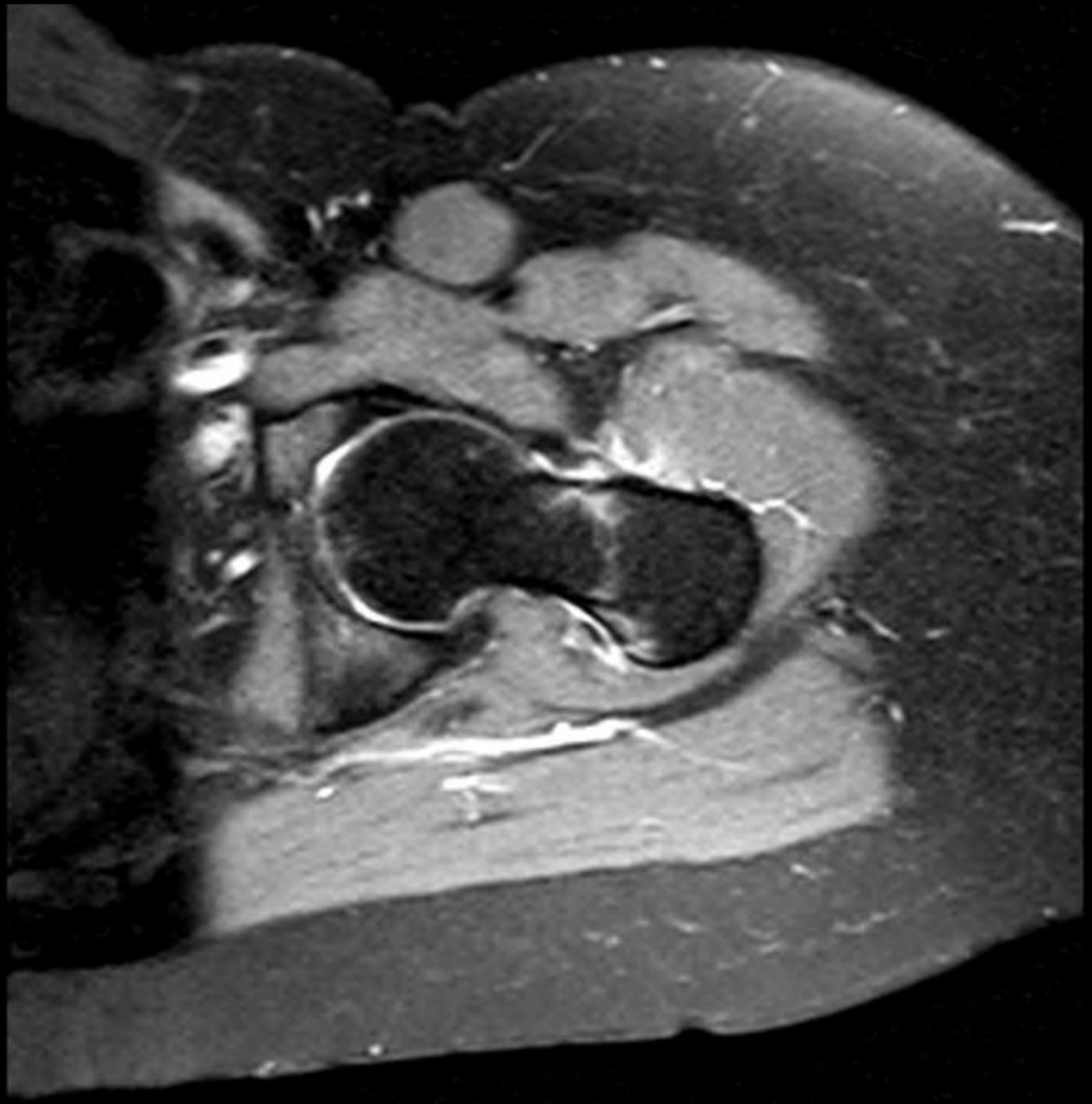









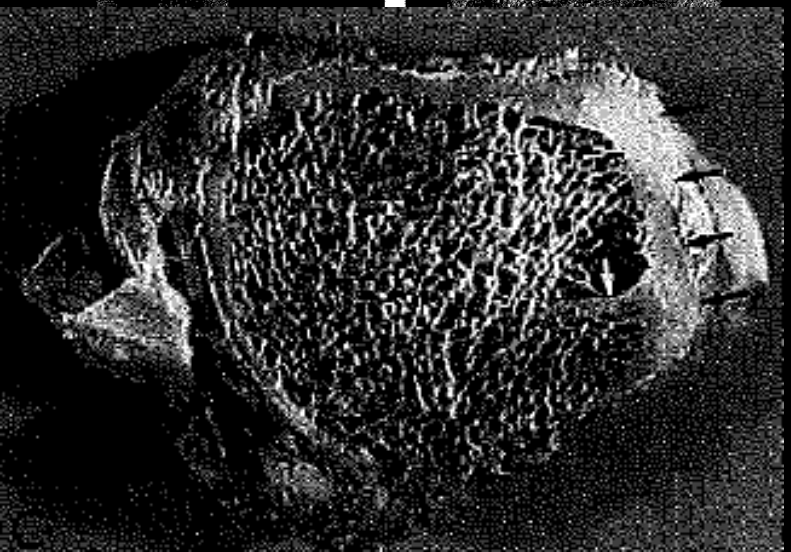
Stress fracture, fatigue-type, medial aspect femoral neck with marrow edema centered at the anatomical region of the calcar femorale without violation of the lateral femoral cortex.

Invest Radiol 1990;25:1311–1315.

The Calcar Femorale

An Anatomic, Radiologic, and Surgical Correlative Study

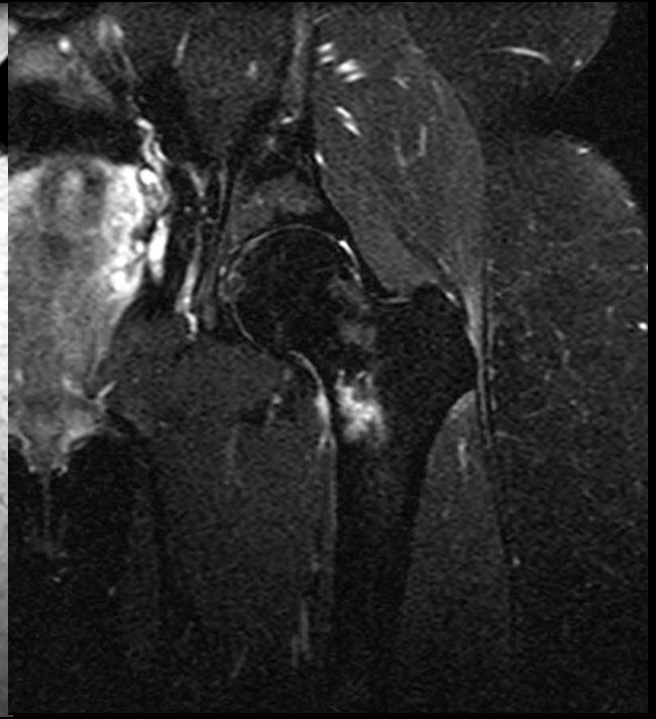
RICHARD G. STILES, MD,* CARLOS J. LAVERINA, MD,† DONALD RESNICK, MD,* AND F. RICHARD CONVERY, MD†



Calcar femorale = “thin plate of condensed cancellous bone oriented vertically within the medullary canal of the proximal portion of the femur, deep to the lesser trochanter…originates from the posteromedial portion of the femoral shaft and radiates laterally through the cancellous tissue towards the greater trochanter.”

DO NOT confuse the calcar femorale w/ the medial femoral cortex.

Calcar femorale may act as a guide for the medullary reamer during hip arthroplasty procedures.

AJR 2008; 190:1616–1620

Stress-Related Injuries Around the Lesser Trochanter in Long-Distance Runners

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Jeffrey S. Peterson[2]
Sandip Biswal[3]
Christopher F. Beaulieu[3]
Michael Fredericson[4]

OBJECTIVE. Imaging abnormalities around the lesser trochanter are occasionally found in long-distance runners, yet little research has been conducted concerning this area of the hip. In addition, the relation between iliopsoas insertional abnormalities at the lesser trochanter and femoral neck stress injuries has not been examined, to our knowledge. We report MRI findings at the lesser trochanter in nine long-distance runners with hip or groin pain and a consistent constellation of the following findings: abnormalities associated with the iliopsoas tendon and its insertion, including marrow edema at the lesser trochanter; periostitis around the lesser trochanter; and bone marrow edema in the femoral neck. One case involved temporal progression to a cortical fracture.

CONCLUSION. Long-distance runners with hip or groin pain and abnormal MRI findings involving the insertion of the iliopsoas tendon and marrow edema in the lesser trochanter may be at risk of stress injuries at the femoral neck.

TABLE 1: Summary of MRI Findings at Lesser Trochanter

Sex	Marrow Edema		Iliopsoas Findings[a]	Fracture Line	Contralateral Hip
	Femoral Neck	Lesser Trochanter			
F[b]	Present, present	Present, present	Present, present	Absent, present	Normal, normal
F	Present	Present	Present	Present	Normal
F	Present	Present	Present	Absent	Normal
F	Present	Present	Present	Absent	Not depicted
F	Present	Present	Present	Absent	Not depicted
M	Present	Present	Present	Absent	Not depicted
F	Present	Absent	Present	Present	Normal
M	Present	Present	Present	Absent	Normal
M	Present	Present	Present	Absent	Normal