A series of 5 interesting cases obtained from chiropractic clinics are presented here. These cases are part of a study assessing radiographic interpretation skills among chiropractors. Each case includes a brief clinical history, pertinent examination findings and appropriate radiographic studies. A sample of the questions used in the actual study has been provided. Participants in this study have been contacted and received the actual questionnaire in the mail. The JCCA has published the cases as part of the study. However, if you have not been selected to participate in the study, you are still invited to answer the sample questions provided and quiz yourself. The radiographic interpretations and brief discussions on the nature of the findings along with important clinical and medicolegal issues will be presented in the September issue of JCCA.

As a guideline, selected participants should spend no more than five minutes per case. Referral to reference texts is permissable.

CASE QUESTIONS

1. PLACE A CHECK BESIDE THE MOST PERTINENT RADIOGRAPHIC FINDING(S) VISUALIZED

ALTERED ALIGNMENT	
CHANGE IN BONE DENSITY (FOCAL/REGIONAL/PERIARTICULAR)	
CORTICAL DISRUPTION	
PERIOSTITIS	
CHANGE IN JOINT SPACE	
CHANGE IN ARTICULAR MARGINS	
SOFT TISSUE ALTERATION (SWELLING/MASS/DENSITY)	

2. ON THE BASIS OF YOUR FINDINGS, HOW WOULD YOU CLASSIFY THE NATURE OF THIS CONDITION?

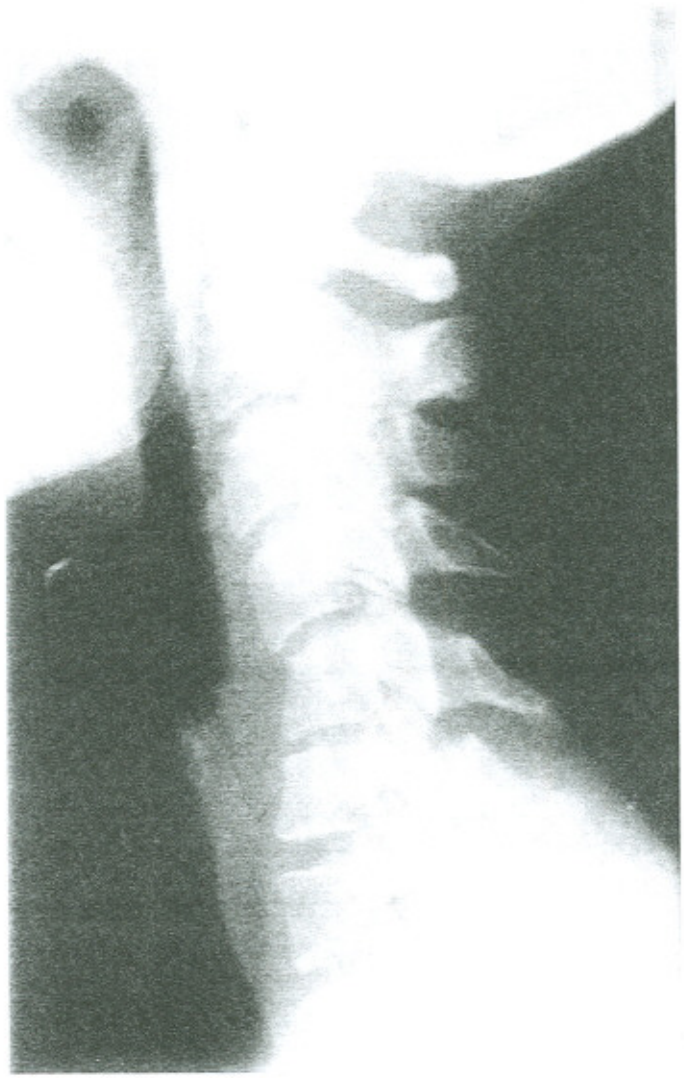
	1ST CHOICE	2ND CHOICE
CONGENITAL		
ARTHRITIC		
TUMOR		
VASCULAR		
INFECTION		
TRAUMATIC		
ENDOCRINE/METABOLIC		
SOFT TISSUE		

3. LIST YOUR OPTIMAL DIAGNOSIS

FIRST CHOICE
SECOND CHOICE

4. WOULD YOU SEND THESE X-RAYS TO A CHIROPRACTIC RADIOLOGIST FOR CONSULTATION? YES NO

5. WOULD YOU REFER THIS PATIENT FOR FURTHER MEDICAL ASSESSMENT? YES NO



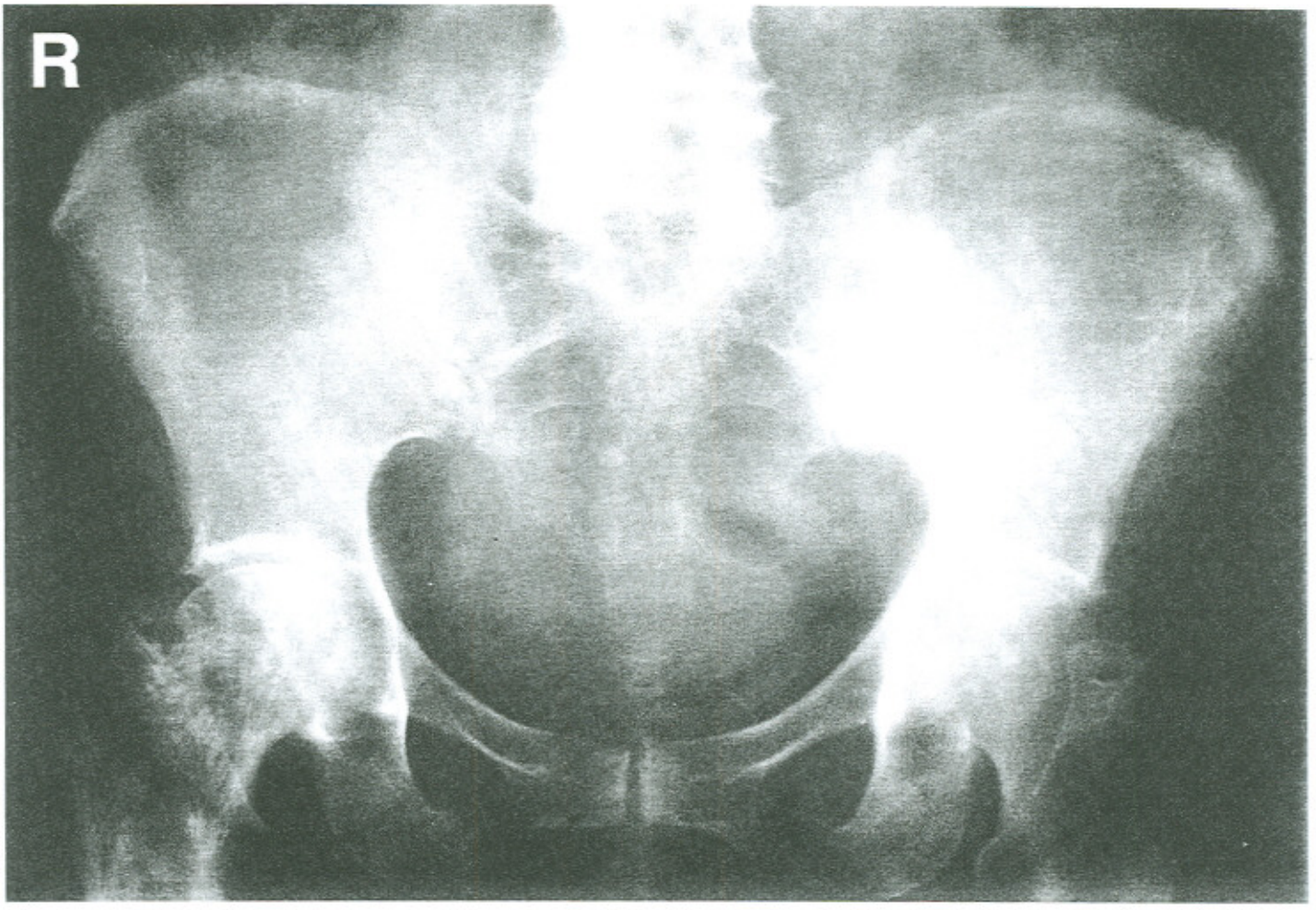
CASE I

HISTORY

A 29-year-old female presented to the CMCC Chiropractic Clinic complaining of left-sided neck pain with associated numbness, pain and paraesthesia in the left arm. The patient fell seventeen days prior, while downhill skiing and immediately experienced left neck pain. The pain was a constant dull aching, with moderate/severe intensity that improved during the day. Overall, the pain has progressively worsened since the trauma and has spread from the neck to the left shoulder region, then posteriorly along the left arm to the elbow. No associated weakness, anterior neck pain nor dysphagia was reported by the patient. The symptoms were not aggravated with movement. The patient states that she may have lost consciousness for a few seconds when she fell. Her previous history included low back pain related to a snowmobile accident six years prior.

EXAMINATION

Postural examination revealed a left lateral listing of the cervical spine with mild anterior head carriage. Severe edema was noted in the posterior cervicothoracic region. All passive and active ranges of motion of the cervical spine were painful, and lateral flexion was decreased by approximately 20% in both directions. Resisted testing of the cervical spine was pain free in all directions. Bilateral Kemp's (compression in lateral flexion) and Jackson's tests (compression in extension with rotation) produced pain from C5 to C7. Doorbell's test (digital pressure over the anterior nerve roots) was positive on the left at C5, C6 and C7. Testing for thoracic outlet syndrome by hyperabduction reproduced the paraesthesia down the left arm. Neurologic examination was unremarkable.



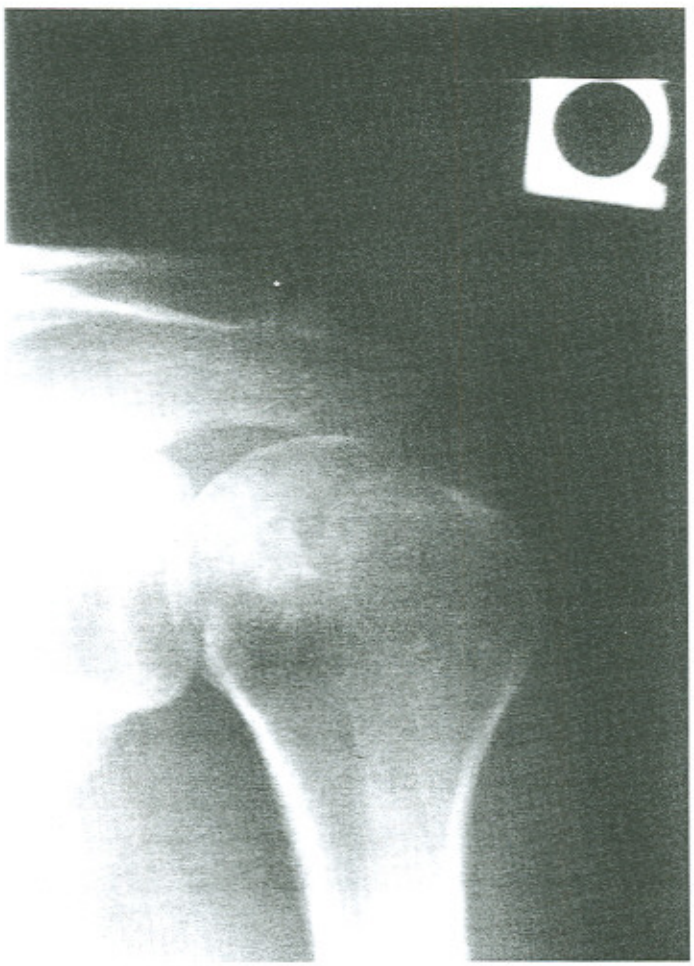
CASE II

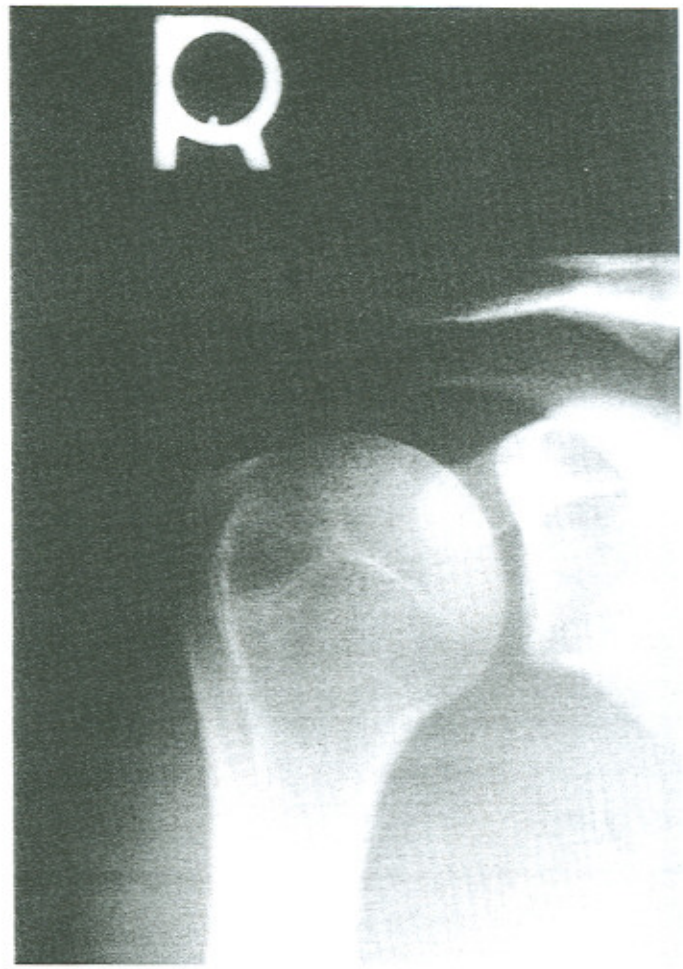
HISTORY

A 72-year-old female presented to the CMCC Chiropractic Clinic with a chief complaint of pain centrally in the lumbosacral region. The pain has been intermittent for years, occurring every few days to a week. She describes the pain as an achy sensation of mild to moderate intensity, that was initiated and aggravated by walking. The duration of the episodes varied with the amount of walking the patient performed. No radiation of pain, night pain, associated symptoms, nor weight loss were reported.

EXAMINATION

Ranges of motion in the lumbar spine were within normal limits. Neurologic examination was unremarkable. PA compression of the sacroiliac joint and Patrick Faber test (flexion, abduction and external rotation of the hip joint) were positive on the right. There was tenderness to palpation throughout the lumbar and buttock region bilaterally. (right psoas, and bilateral piriformis, gluteus medius, quadratus lumborum and lumbar paraspinal muscles)





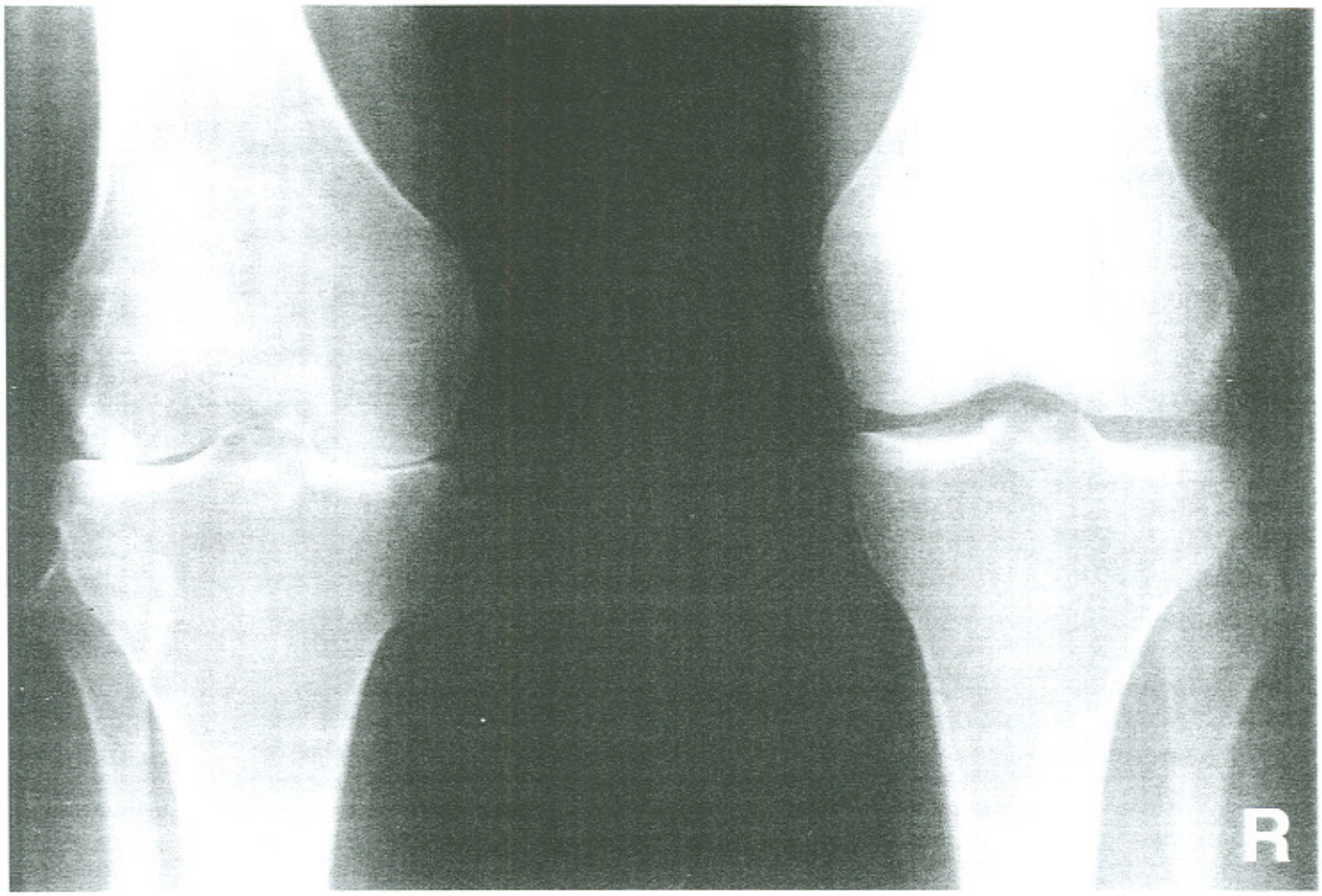
CASE III

HISTORY

A 32-year-old female presented to CMCC Chiropractic Clinic with the main complaint of left should pain for 3 months duration. The inciting event was a dislocation of the left glenohumeral joint. The pain was localized to the anterior glenohumeral joint and distal portion of the deltoid muscle. At times the pain was sharp, while at other times it was dull and aching in nature. Movement of the shoulder and sleeping positions aggravated the pain sporadically.

EXAMINATION

Active shoulder ranges of motion of the left shoulder were all painful at the end range, decreased by 50% in flexion, external rotation, abduction and only slightly reduced in extension and adduction. Weakness was noted on resisted testing in all directions on the left, and graded at 4/5. The left bicipital tendon was tender upon resisted forward flexion of the shoulder while the arm is supinated and the elbow is extended (Speed's test). The distal aspect of the left deltoid muscle was also tender to palpation. All reflexes were unable to be elicited. Otherwise, the neurologic examination was unremarkable.



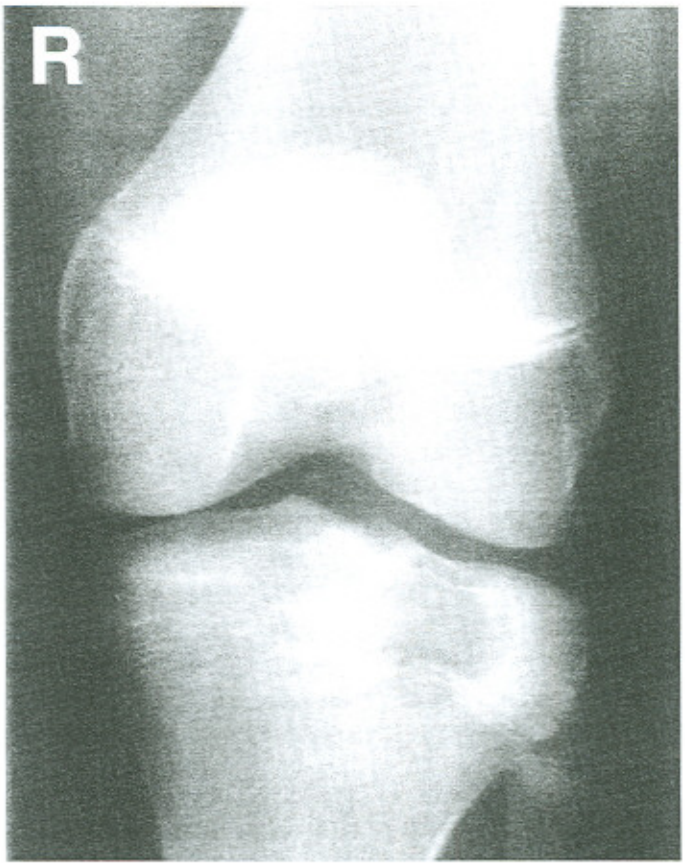
CASE IV

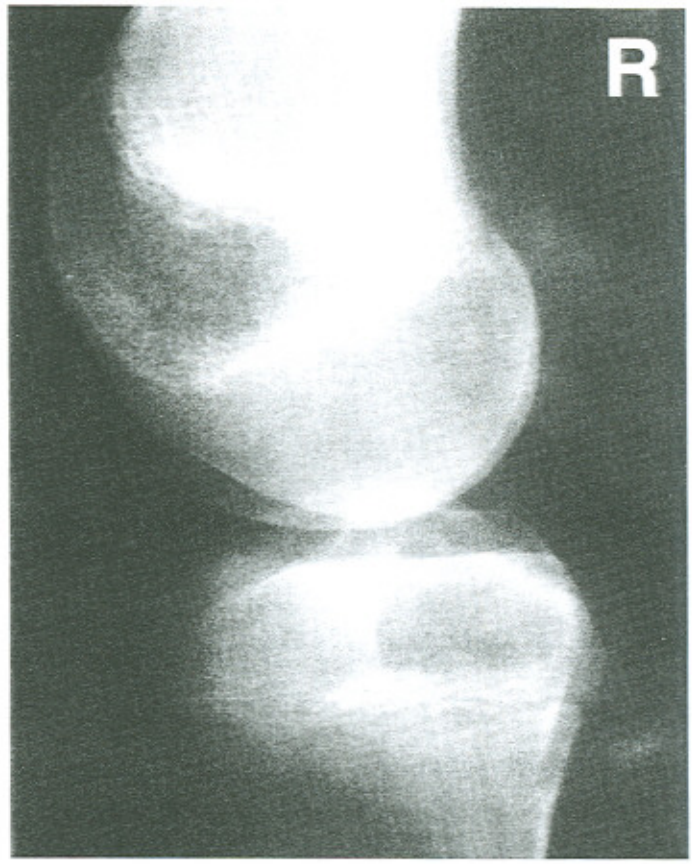
HISTORY

A 27-year-old female presented to an outpatient clinic with a chief complaint of left knee pain along the medial compartment. She had spent the last year in Haiti, where she was stricken with endemic fever. She experienced severe left knee pain. She returned to Canada and received an intra-articular dose of cortisone. The knee pain has improved, however she now uses a cane to ambulate. The patient has also experienced bilateral hand and wrist pain, bilateral foot pain and lower cervical pain over a 10 year period.

EXAMINATION

Active and passive ranges of motion were severely restricted in the left knee. Mild medial and lateral joint line tenderness was noted on the left. Resisted knee flexion and extension was diminished on the left, graded at 4/5. No ligamentous laxity involving the left knee joint was evident. The neurological examination was unremarkable.





CASE V

HISTORY

A 12-year-old boy presented to the CMCC Chiropractic Clinic complaining of a painful right knee. The pain began after he slipped and fell on this knee in a hyperflexed position, with his leg underneath him approximately 1 week prior. Jumping aggravated the pain especially when landing on his feet.

EXAMINATION

Infrapatellar effusion and hematoma in the peripatellar region on the right were noted. Right medial joint line tenderness was elicited. Valgus stress testing at 30 degrees and the patellar compression test produced pain on the right. Kneeling and squatting also reproduced the patient's pain. The remainder of the orthopaedic examination was unremarkable. The lateral head of the gastrocnemius muscle and the tensor fascia lata muscle were tender to palpation on the right.