

Radiology Investigation

Peter Gendall





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Please return by fax and an appointment
will be arranged or call us direct.

1 Patient Information

Name	Address
Date of Birth	Suburb
Phone	Mobile
Sex	ACOR
SGR	

2 Clinical Symptoms

Notes

3 Suggested Examination

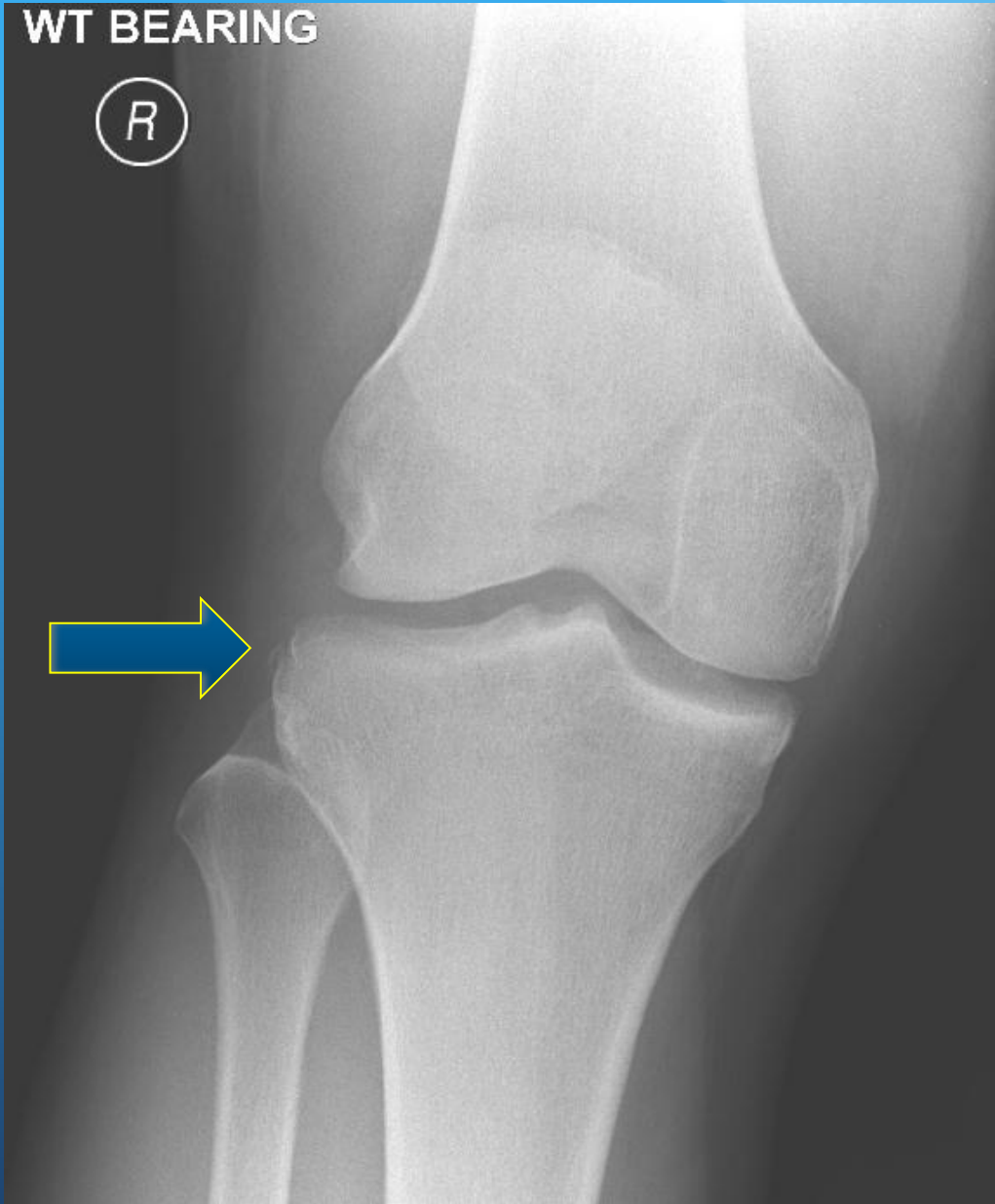
☐ Ultrasound	
☐ X-Ray	
☐ Guided Injection	
☐ Arterial Ultrasound	
*see order set list	

4 Referring Information

Practice Information	Phone	
Name	Signature	Date

WT BEARING

(R)





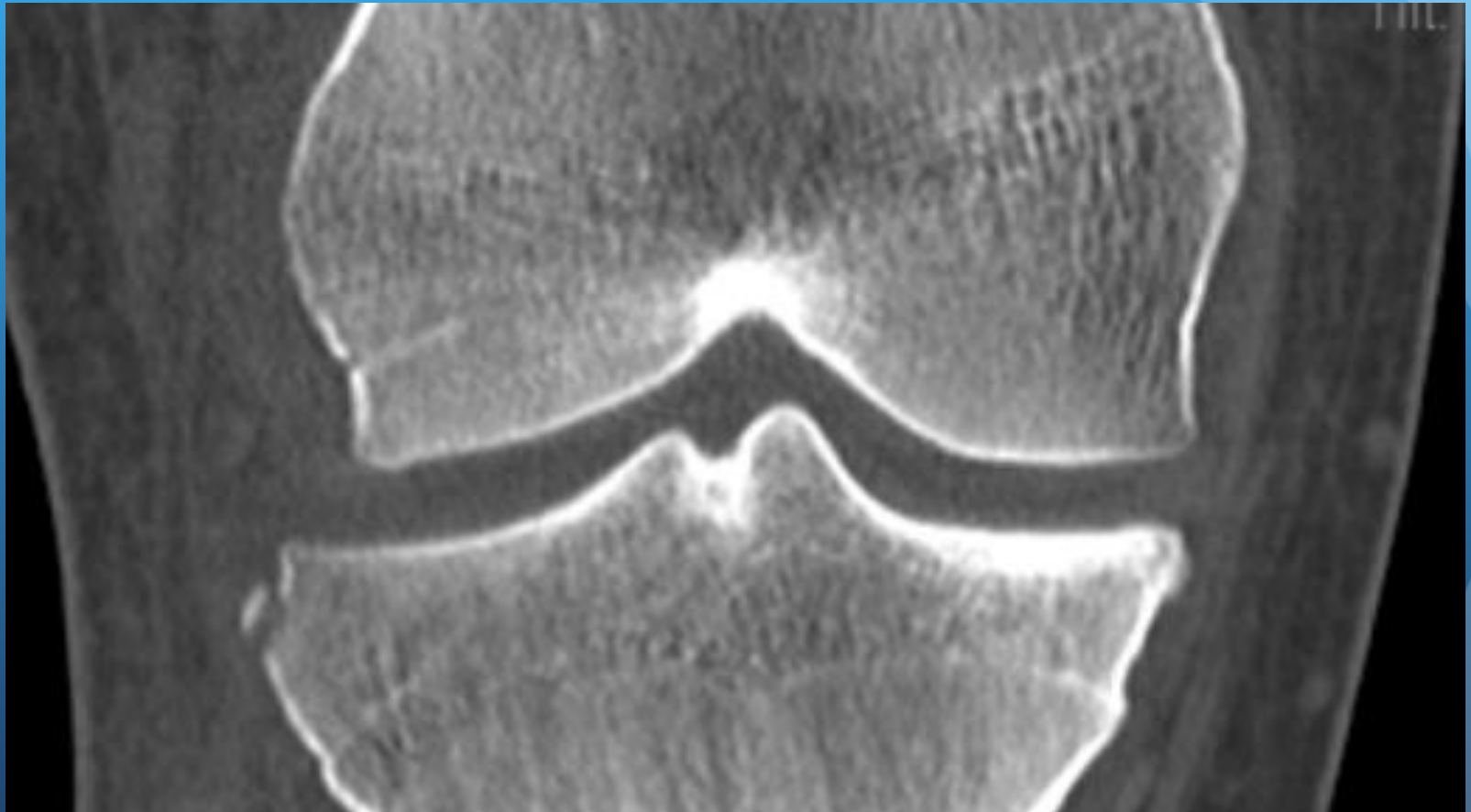
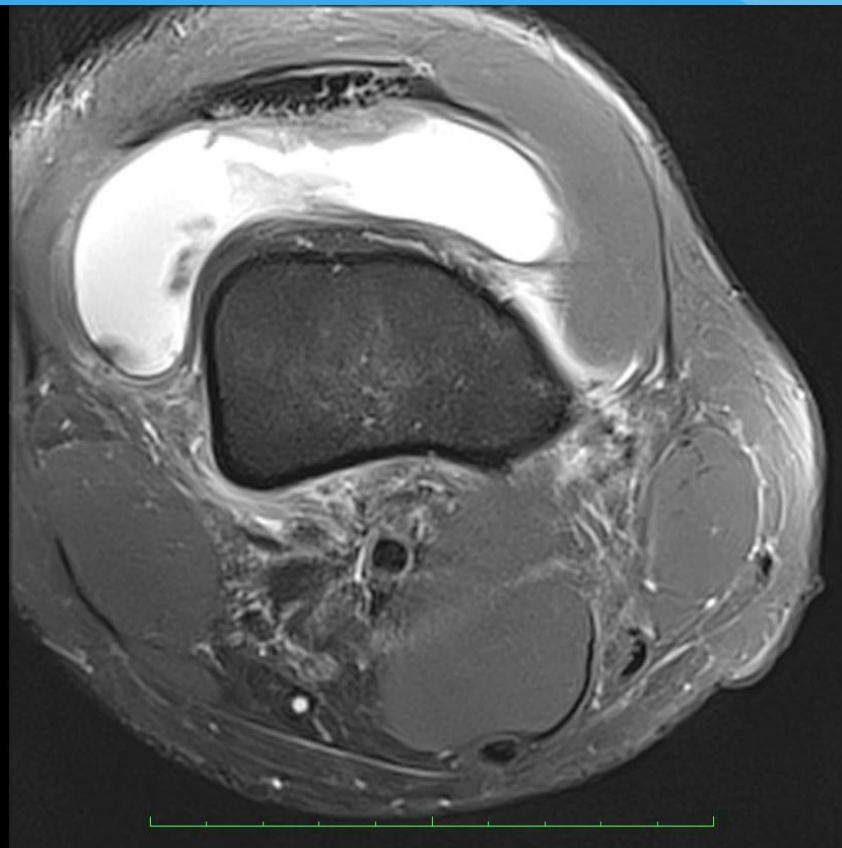


Image size: 256 x 256
View size: 1658 x 833
WL: 336 WW: 770

K472680 (19 y, 19 y)
Image Filter
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5002



Zoom: 325% Angle: 0
Im: 1/24 S (S -> I)
Thickness: 4.00 mm Location: 68.56 mm

721
336
-49

TE: 35 TR: 3350
FS: 1.5
9/05/12 3:30:18 PM
Made In Osirix







CLAVICULAR OSTEOLYSIS

DIVERGENT LIS FRANC





Jacques Lis Franc

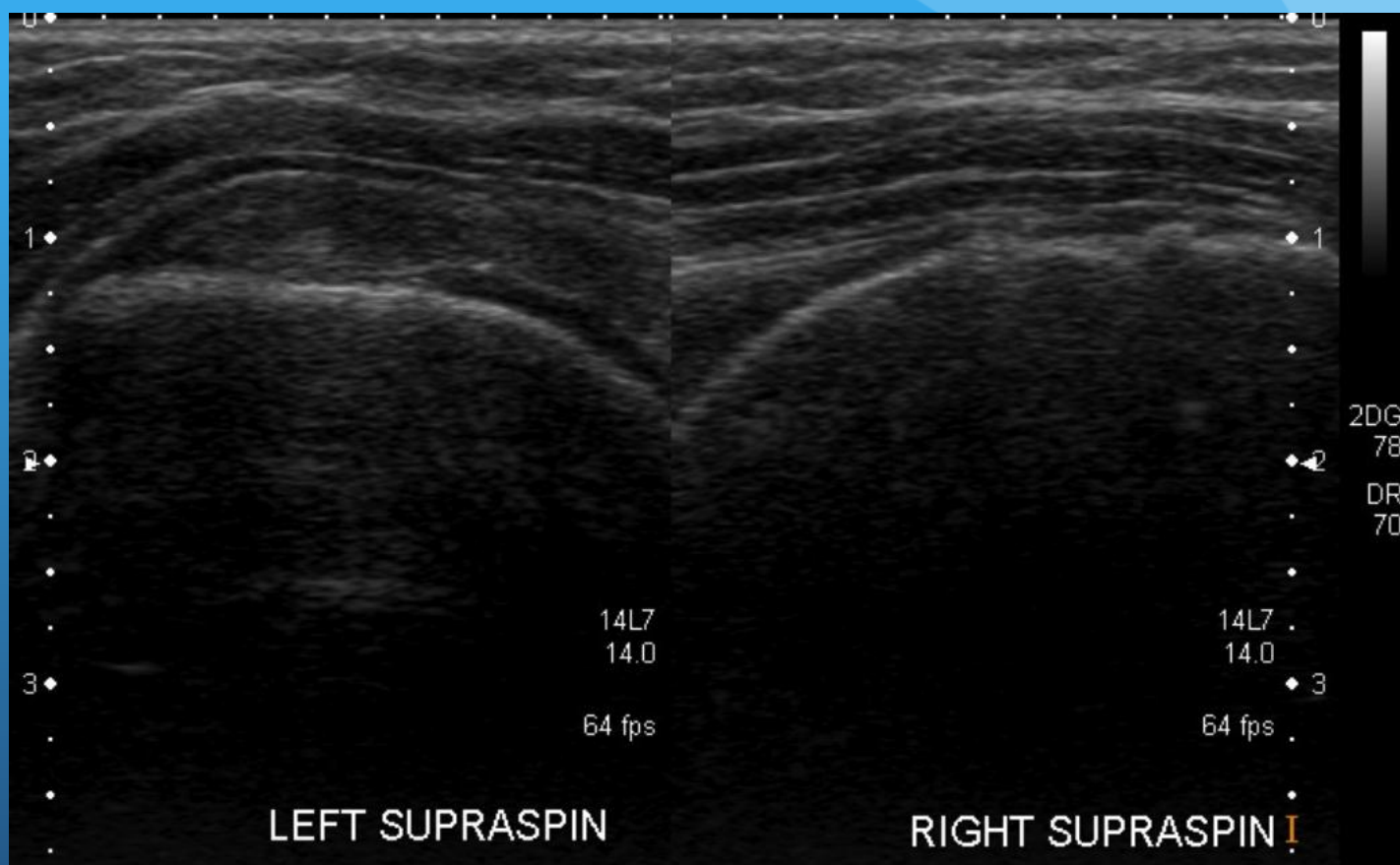


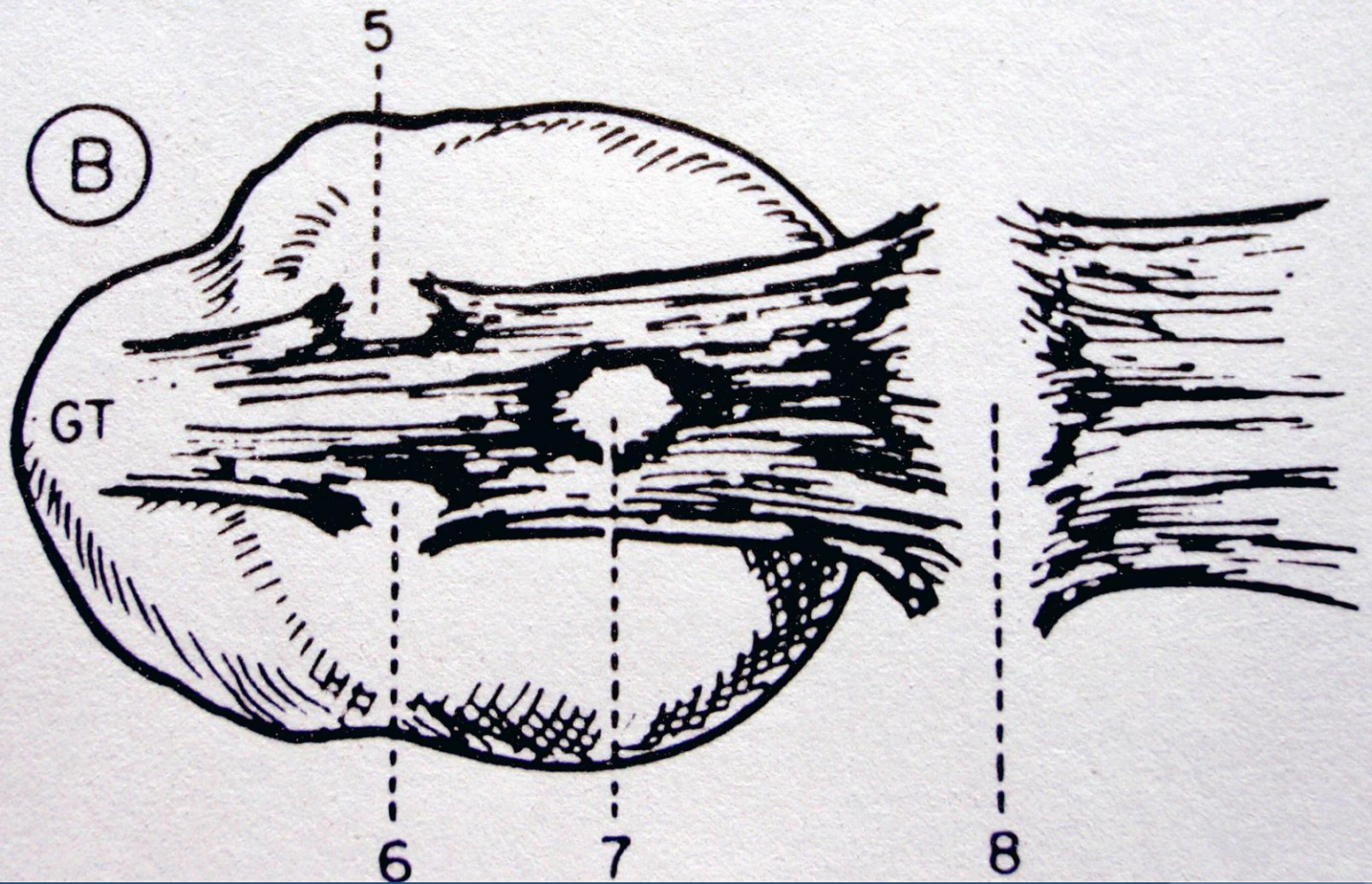
MACH EFFECT



Calcific tendonitis

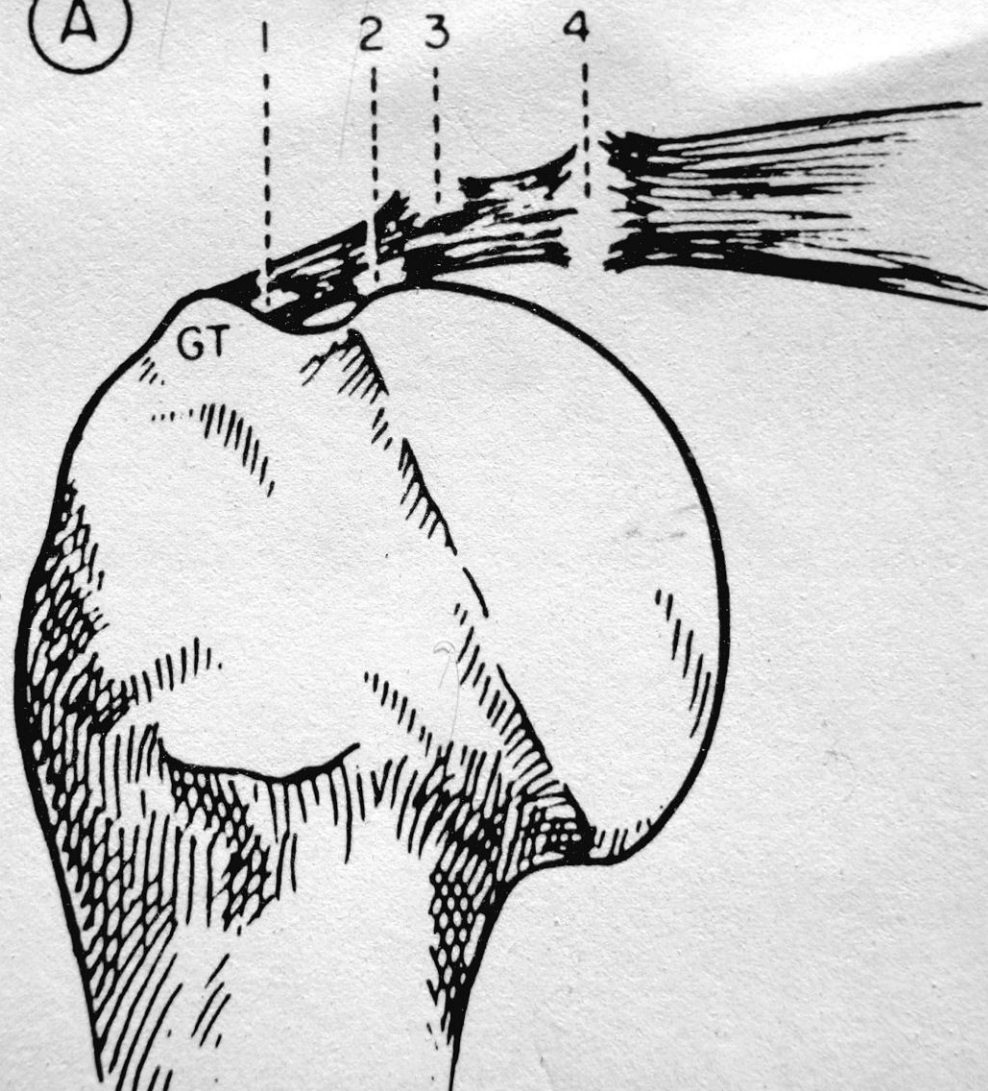


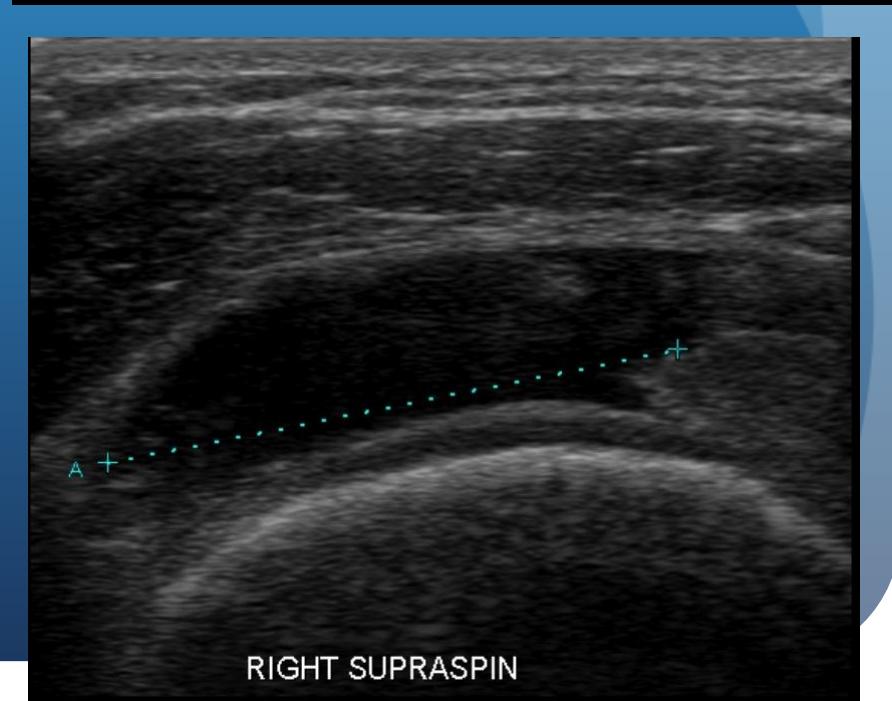
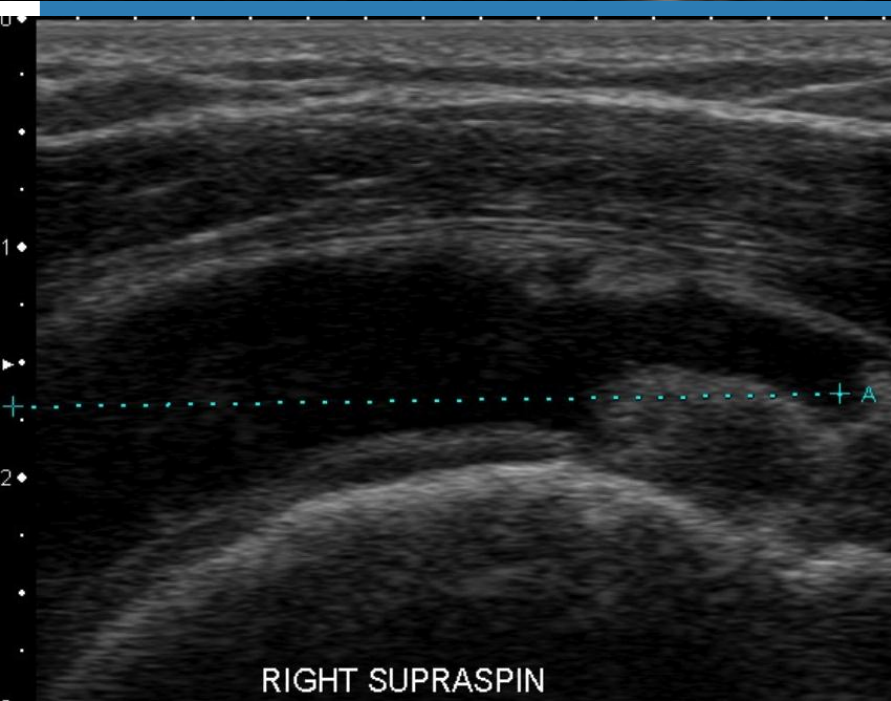
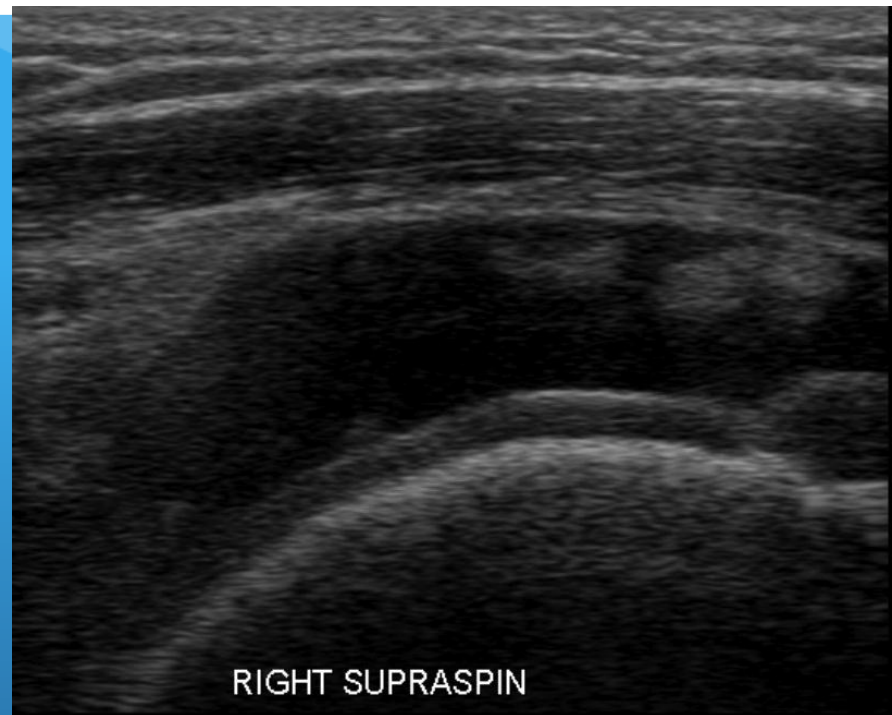




Definitions

(A)







Ultrasonography of symptomatic rotator cuff tears compared with MR imaging and surgery.

Fotiadou AN, Vlychou M, Papadopoulos P, Karataglis DS, Palladas P, Fezoulidis IV.

Radiology Department, University Hospital of Larissa, Mezourlo 41110, Larissa, Greece; Radiology Department, G. Papanikolaou Hospital, Exochi 32100, Thessaloniki, Greece.

The findings in 88 patients were compared with arthroscopy or open surgery. RESULTS: Full-thickness tear was confirmed in 57 cases, partial-thickness tear in 30 cases and degenerative changes without tear in 1. In all 57 cases of full-thickness tear and in 28 out of 30 cases of partial-thickness tear the supraspinatus tendon was involved. The accuracy in the detection of full-thickness tears was 98 and 100% for ultrasonography and magnetic resonance imaging, respectively. The accuracy in the detection of bursal or articular partial-thickness tears was 87 and 90% for ultrasonography and magnetic resonance imaging, respectively.

The clinical role of shoulder ultrasound.

Sonnabend DH, Hughes JS, Giuffre BM,
Farrell R.

Department of Traumatic and
Orthopaedic Surgery, Prince of Wales
Hospital

New South Wales, Australia

: Ultrasound was found to be reliable for the detection of full-thickness cuff tears (positive predictive value 96%). In the assessment of partial thickness tears, ultrasound produced few false positives, but failed to diagnose a significant proportion of these lesions. Lamination and other interstitial cuff pathology were not reliably detected by ultrasound.

Conclusions

CONCLUSIONS: Ultrasound is cheaper than MRI and arthrography, and is both non-invasive and 'dynamic'. It is reliable in the diagnosis of full-thickness cuff tears and is a useful adjunct in the diagnosis of cuff impingement and partial thickness tears, but is very much operator-dependent.

. We conclude that MRI and US are both sensitive in detection of abnormalities of the rotator cuff. Ultrasound should be the primary diagnostic method in screening of shoulder pain because it is economic and fast. The MRI technique should be used secondary because it provides more information about extent of tendons and has lower risk of artefacts .

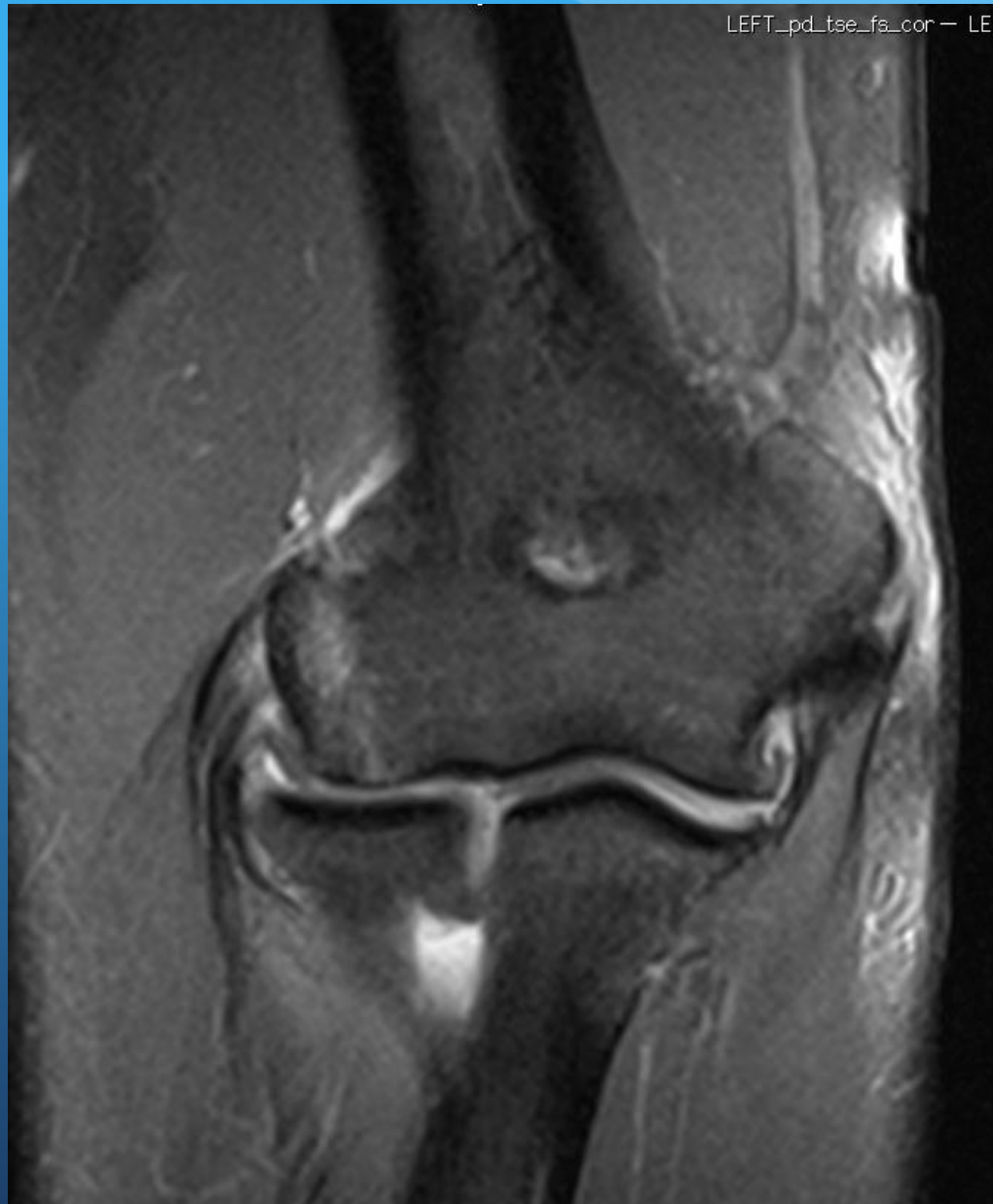
The clinical role of shoulder ultrasound.

Sonnabend DH, Hughes JS, Giuffre BM, Farrell R.
Department of Traumatic and Orthopaedic Surgery,
Prince of Wales Hospital, New South Wales, Australia.

Diagnosis of rotator cuff lesions: comparison of US and MRI on 38 joint specimens.

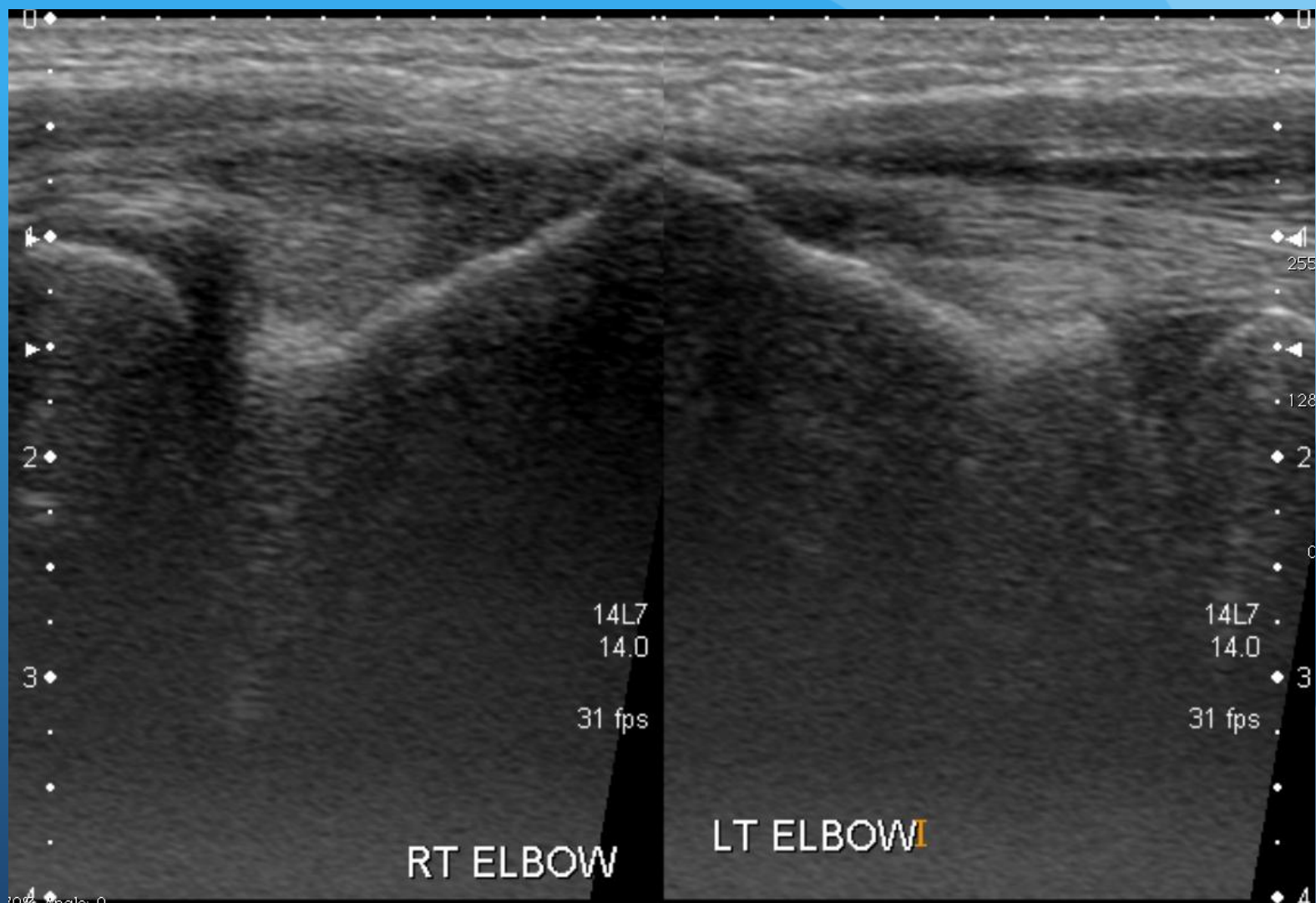
Bachmann GF, Melzer C, Heinrichs CM, Möhring B, Rominger MB.
Department of Diagnostic Radiology, Justus Liebig University, D-35 392
Giessen, Germany.

LEFT_pd_tse_fs_cor — LEF



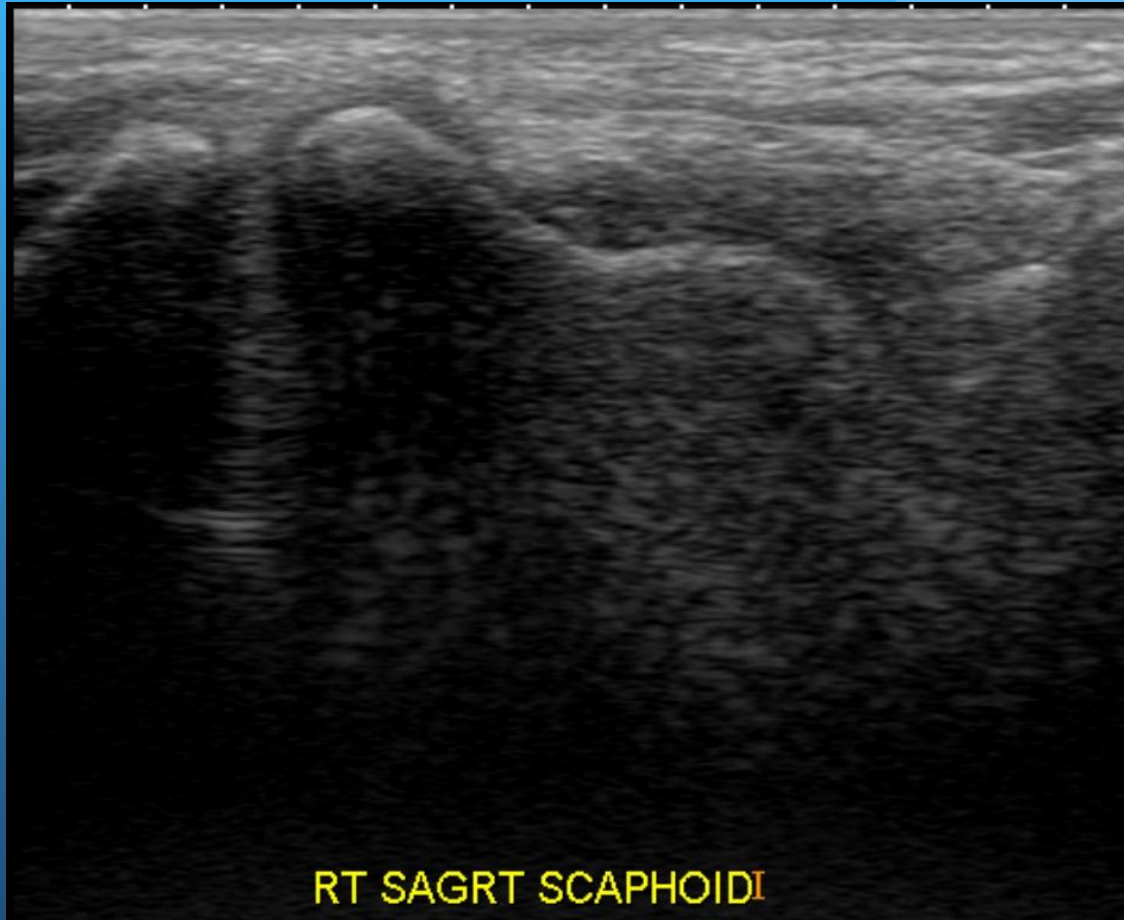


RT COMMON EXT I



RT ELBOW

LT ELBOW



RT SAGRT SCAPHOIDI





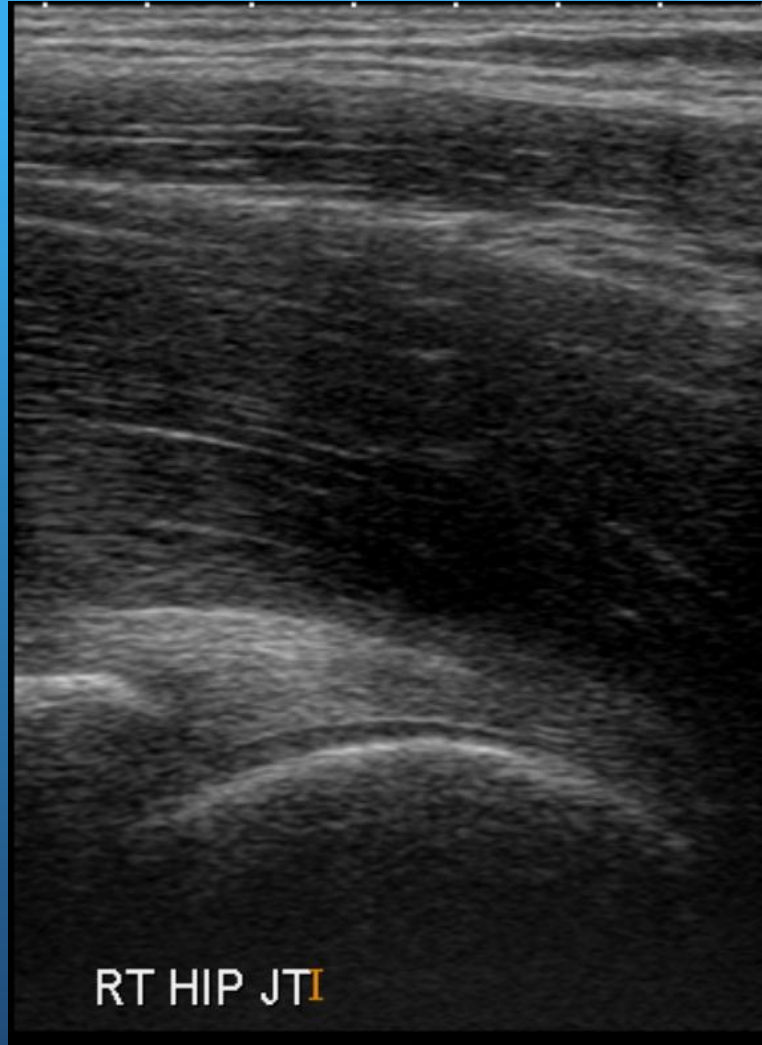




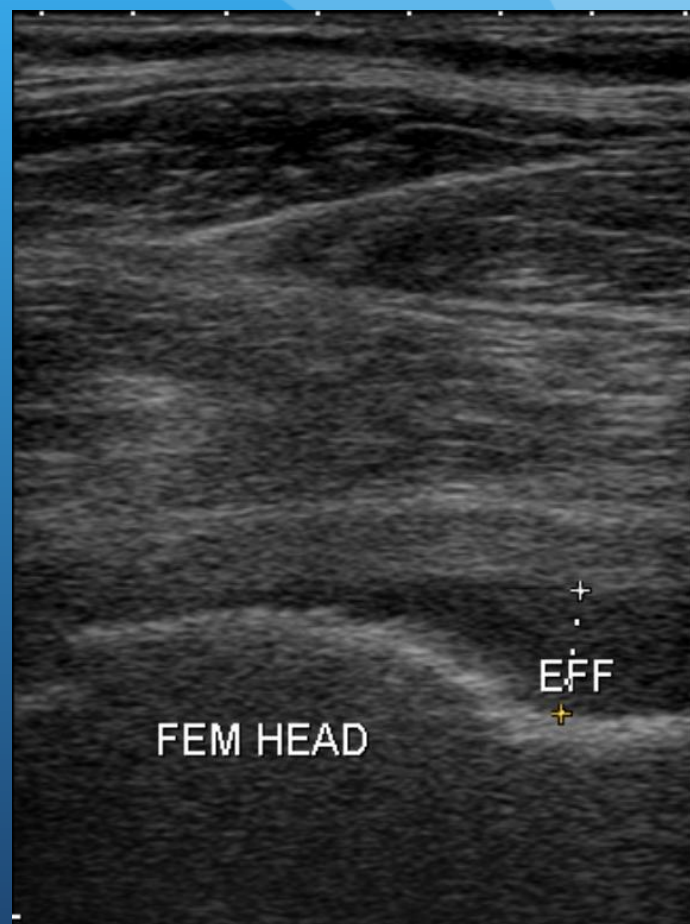
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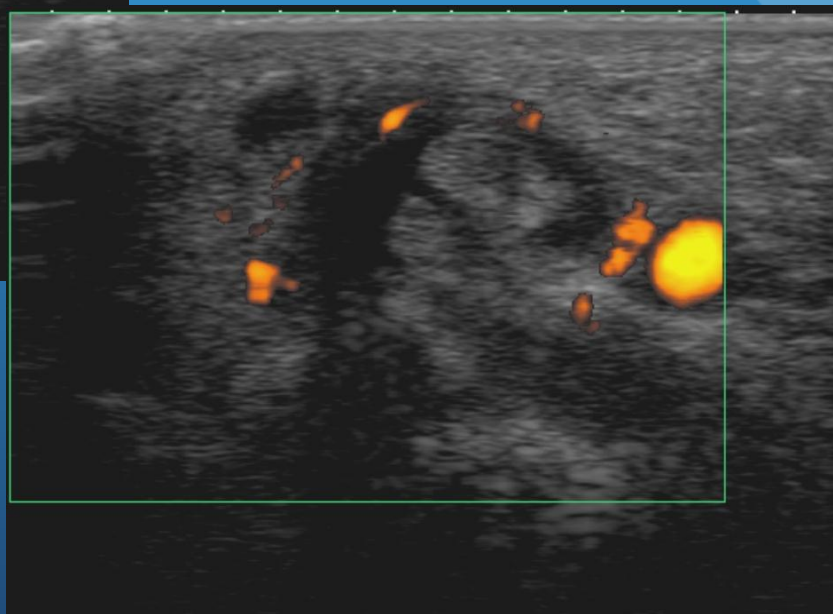
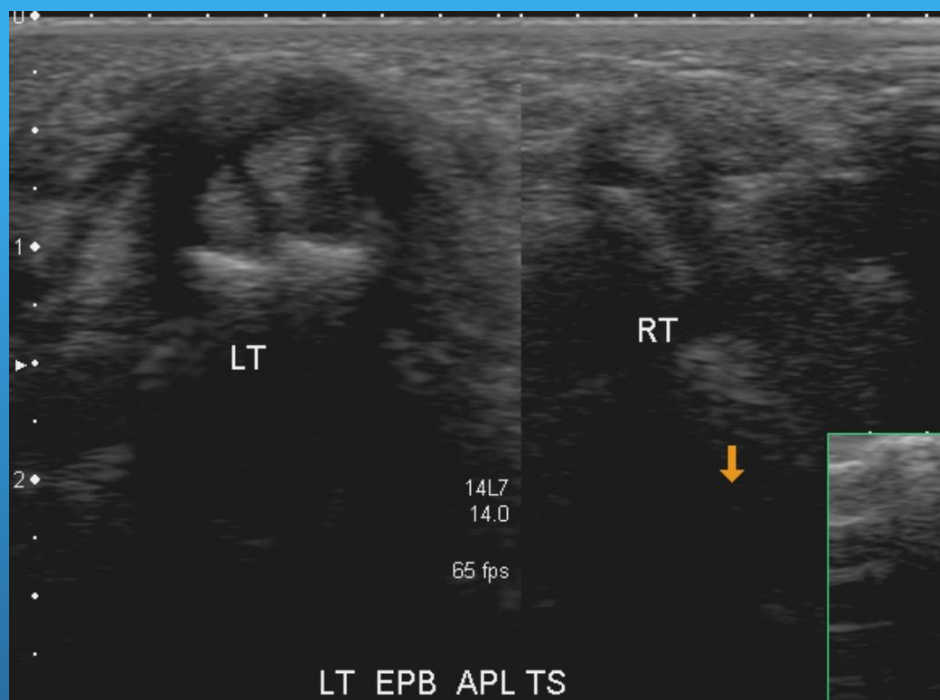
QXN0316 (64 y, 63
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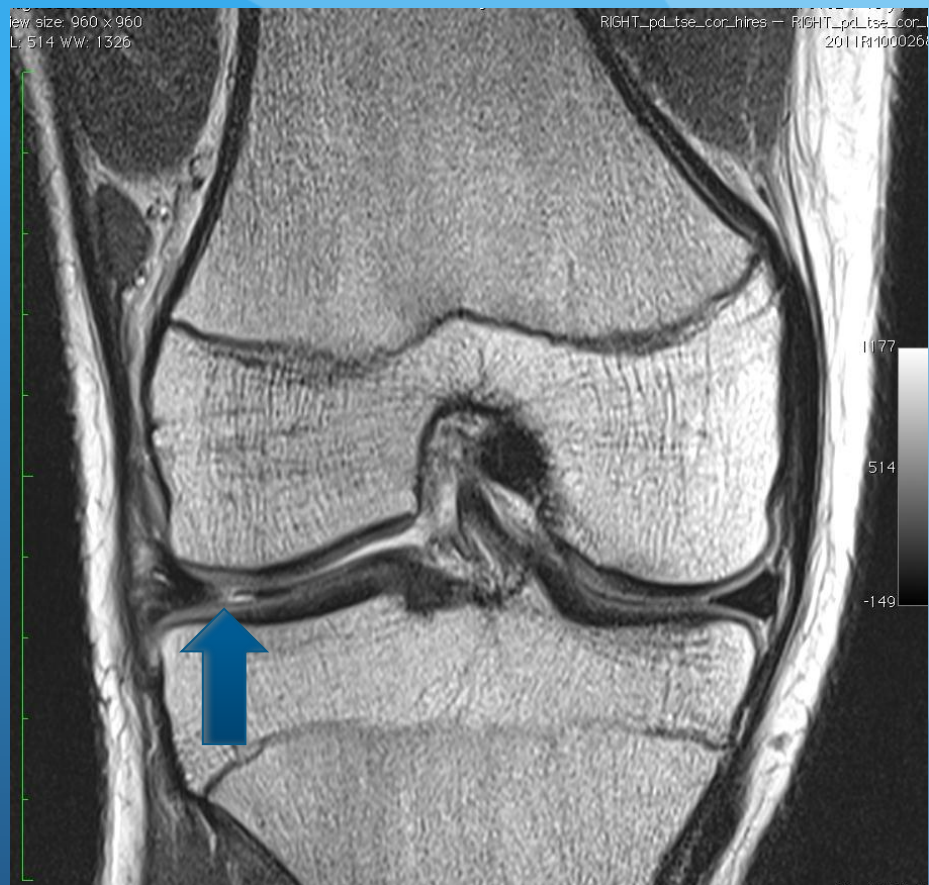


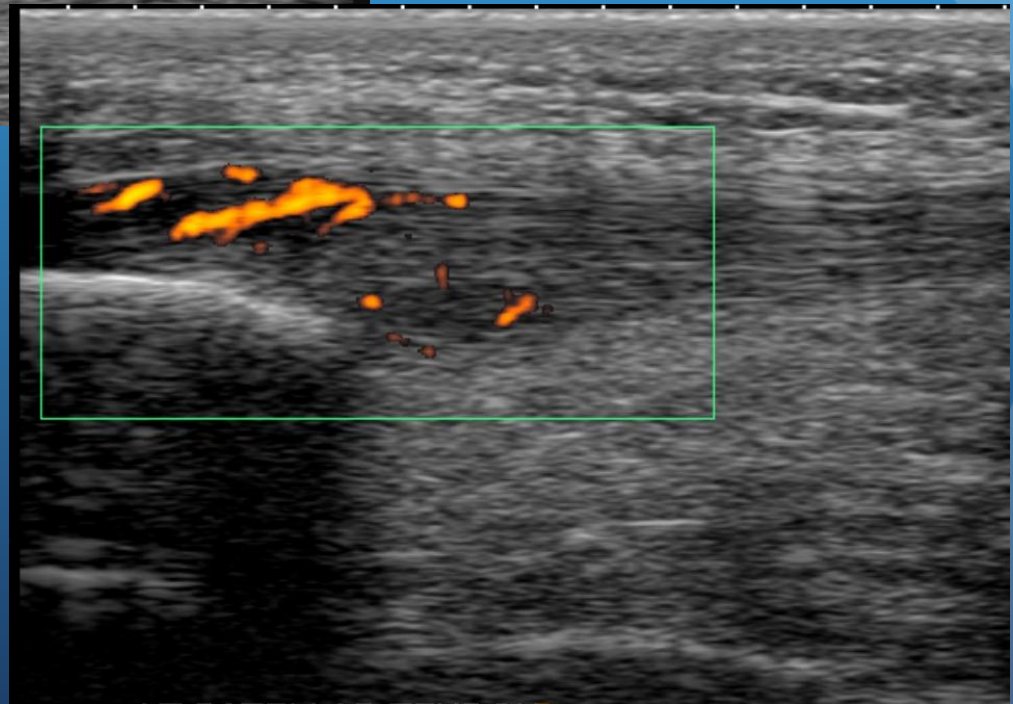


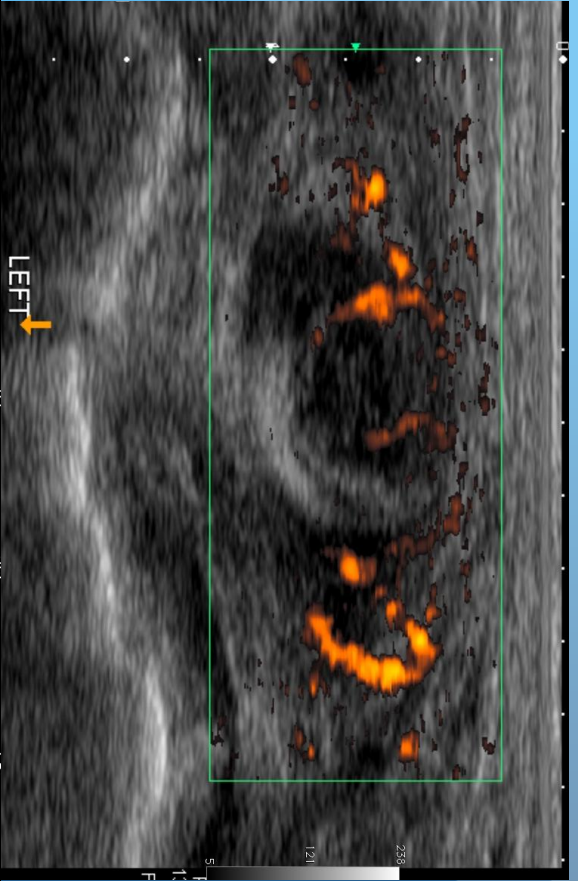
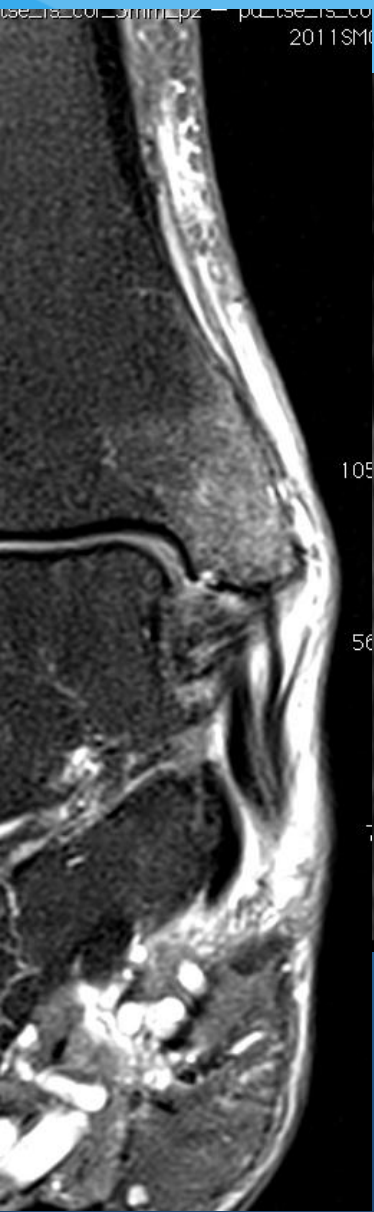
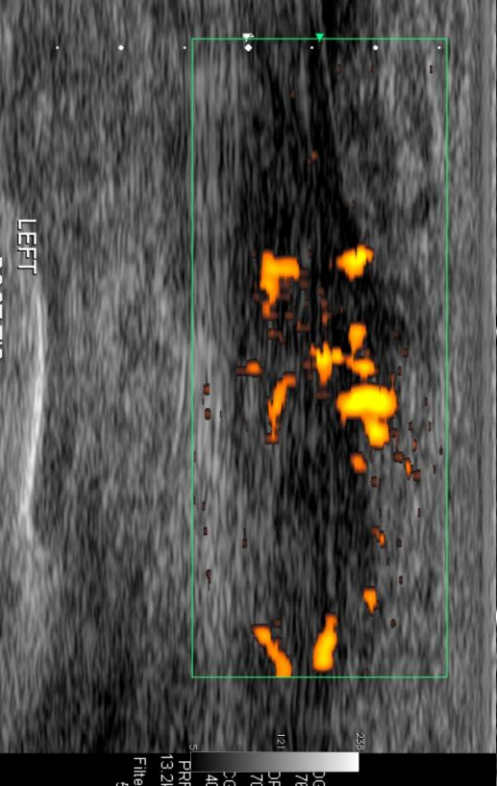
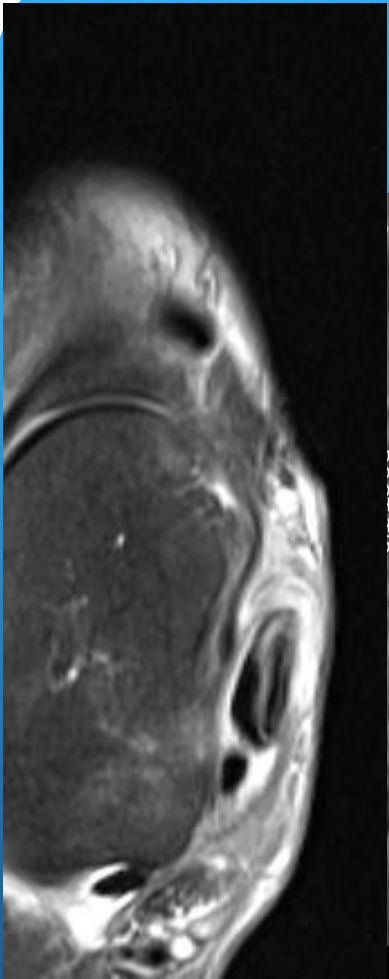
RT HIP JTI



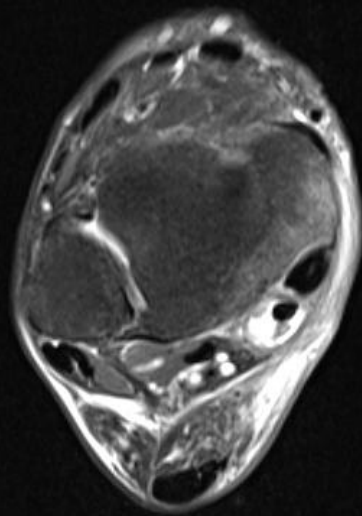




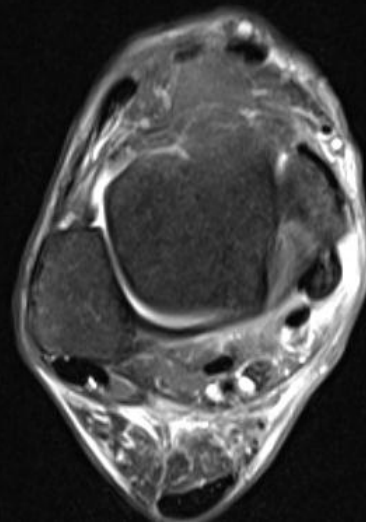




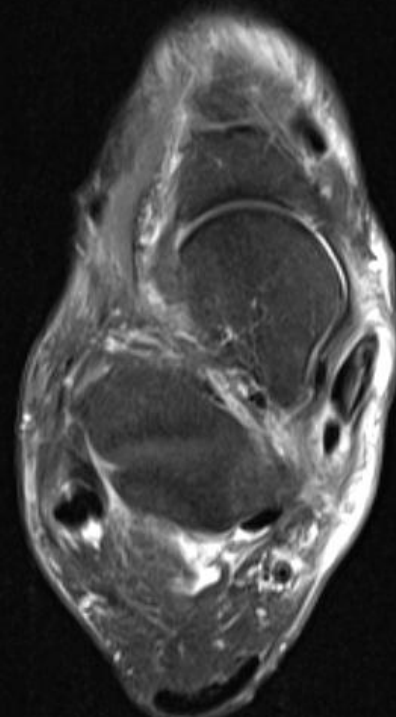
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mm Z: -19.99 mm



TE:



TE:



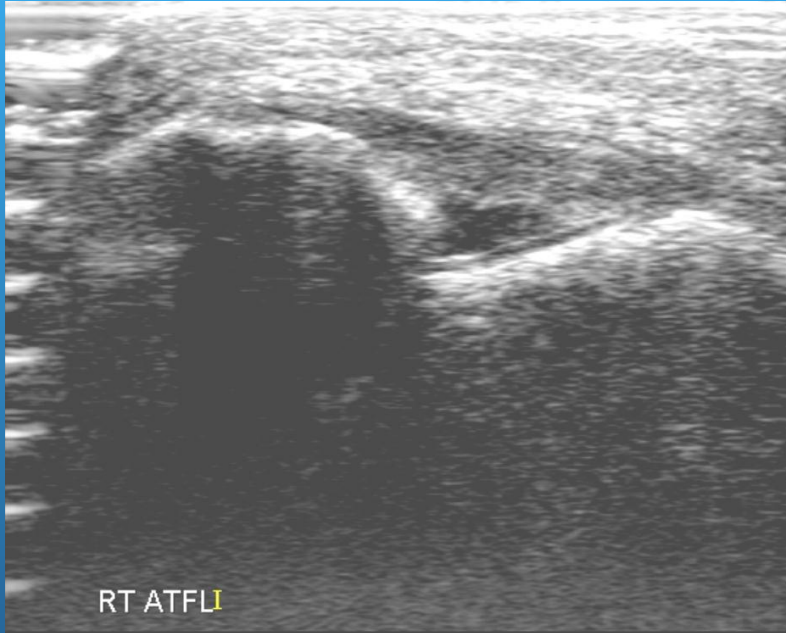


Image size: 456 x 1079
View size: 818 x 817
WL: 77 WW: 260

1

2

3



EGF600Z (58 y , 56 y)
SPINE
MR
105

207

77

-53



Zoom: 76% Angle: 0
Im: 1/31
Position: HFS

14/10/08 10:06:00 AM
Made In OsiriX

WB MRI has shown higher sensitivity than PET CT
In detection of bone metastasis in several series

This is at least partly due to higher resolution
(Less than 5mm)
Compared to PET CT

Better resolution in latest PET CT scanners, but also in new MRI

Specificity slightly better in PET CT
80% vs 76% for WB MRI

Primary tumours with highest incidence of bone
Metastasis
Prostate and Breast

Followed by Thyroid, Renal, Lung carcinomas

These tumours account for about 80% metastatic
Bone disease

Bone Metastases

Osteolytic.....50%

Osteoblastic.....35% mainly prostate or sarcoma

Mixed type.....15% breast, cervical, colon, thyroid

MRI detects altered amounts of water in metastatic tissue

NOT

- osteolysis (plain XR and CT)
- osteosclerosis
- increased osteoblastic activity (Tc MDP Scan)

Sclerotic metastases usually behave like their
Lytic counterparts on MRI. Even when very marked, sclerotic lesions
rarely remain hypointense on all sequences.

After successful treatment, bone lysis or osteoblastic change remains at site of metastasis.

This is a potent reason for low sensitivity of indirect means of tumour assessment.

CT Scintigraphy Plain XR

Image size: 256 x 256
View size: 1658 x 816
WL: 153 WW: 311

83-00086S (57 y, 50 y)

III_t2_tirm_cor_mbh
1
6



308
153
-2

Zoom: 319% Angle: 0
Im: 14/26 (A -> P)
Thickness: 7.00 mm Location: -32.97 mm

TE: 102 TR: 2180
FS: 1.494
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Image size: 256 x 256
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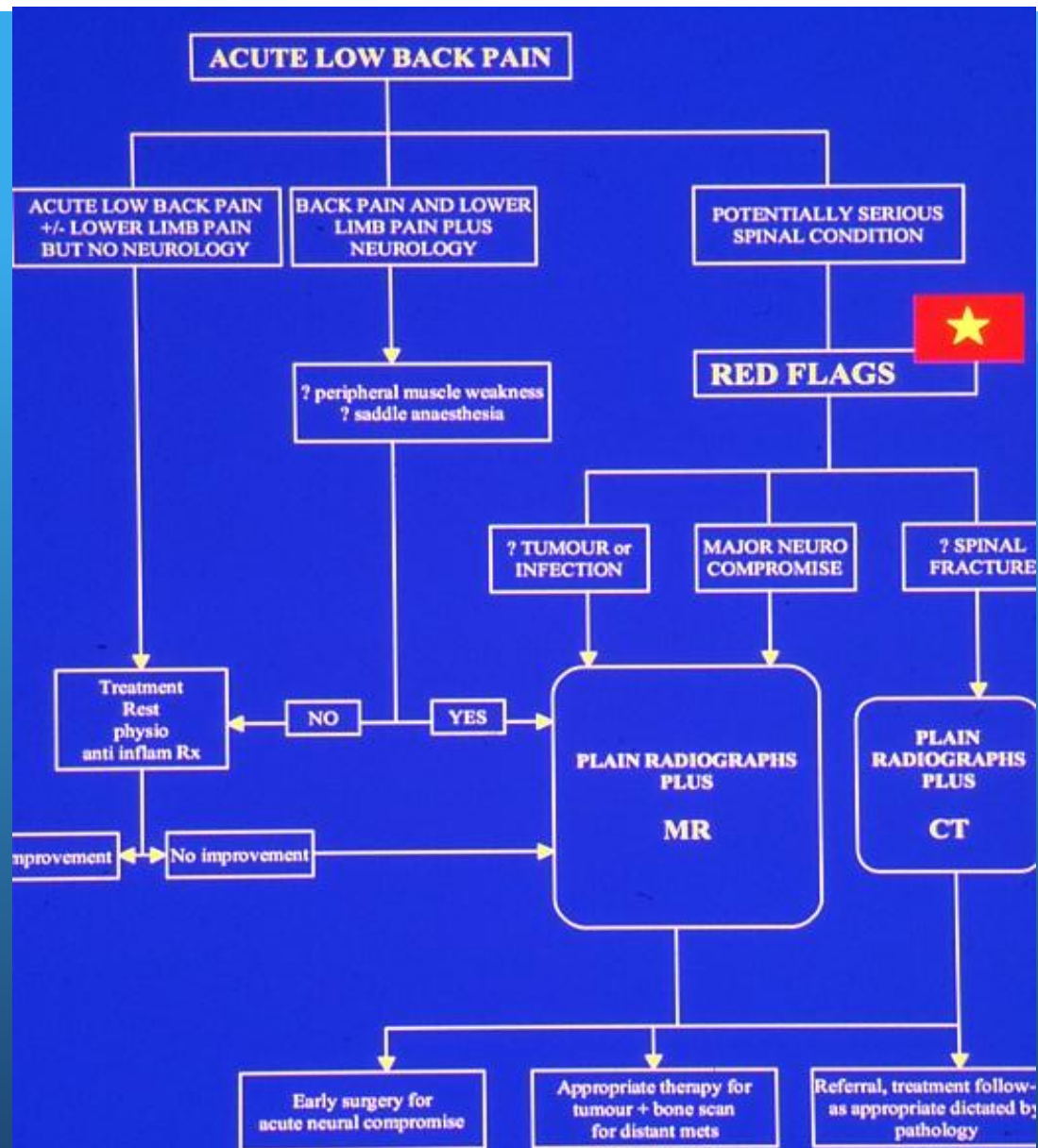
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6



Zoom: 319% Angle: 0
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Thickness: 7.00 mm Location: 1.98 mm

308
153
-2

TE: 102 TR: 2180
FS: 1.494
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RED FLAGS

Mandating Early Investigation of Back Pain

- Possible Fracture
- Possible Tumour or Infection
- Possible Cauda Equina Syndrome
- Other



Possible Tumour or Infection

- Over 50 yrs or under 20 yrs
- History of malignancy
- Constitutional symptoms (fever, chills, weight loss)
- Elevated ESR
- At risk for spinal infection

Recent bacterial infection, IV drug abuse, immune suppression(steroids, transplant, HIV), pain that worsens when supine



Possible fracture

- Injury of sufficient violence to cause fracture
- Minor trauma or even strenuous lifting in older or potentially osteoporotic patient