



REZUMATUL EXAMENULUI FIZIC REUMATOLOGIC SI TESTE PARACLINICE

Razvan Ionescu



Metoda de examinare reumatologica

A modified **GALS** (gait, arms, legs and spine) assessment is a quick way to identify arthritis and mobility problems.^{1,2}

Ask:

1. Have you been troubled by pain or stiffness in your back or muscles or joints? Where?
2. How are you affected by this? Can you walk up and down stairs? Can you get out of a chair easily? Can you dress and wash yourself?

Examine:

1. **Gait:** Ask the patient to walk to the end of the room, turn around and come back. Note the length of the stride, the smoothness of the walk and turning around, the stance, heel strike and arm swing. Is walking painful? Hemiplegic, Parkinsonian, foot drop and other neurological gaits should be obvious.
2. **Arms, legs and spine:**
 - *From behind:* look at the spine for scoliosis, muscle bulk of the shoulders, paraspinal muscles, gluteal muscles and calves; look at the iliac crests for loss of symmetry.
 - *From the side:* look for normal lordosis and thoracic kyphosis. Ask the patient to bend over and look for normal separation of lumbar spinous processes.
 - *From in front:* look for asymmetry or wasting of major muscle groups (shoulders, arms and quadriceps). Is there deformity of the knees, ankles or feet?

When arthritis seems likely to be an important part of the case, take the time to test movement. Look for restricted, asymmetrical or painful movements.

3. **Spine:** Rotation, ask 'Turn your shoulders as far as you can to the right and now to the left.' Lateral flexion, 'Slide your hand down the side of your leg on the right side and now on the left.' Cervical spine—lateral flexion, 'Bend your right ear down towards your shoulder, now on the other side.' Flexion and extension, 'Look up and back as far as you can, now put your chin on your chest.'

4. **Shoulders (acromio-clavicular, glenohumeral, sternoclavicular joints):** 'Put your right hand on your back and reach up as far as you can as if to scratch your back. Now the left. Put your hands up behind your head and your elbows as far back as you can.'
5. **Elbows (extension):** 'With your elbows straight, put your arms down beside you.'
6. **Hands and wrists:** 'Straighten out your arms and hands in front of you.' Look for fixed flexion deformity of the fingers and swelling and deformity of the hands and wrists or wasting of the small muscles of the hands. 'Turn your hands up the other way.' Look at the palms for swelling or muscle wasting. Is supination smooth and complete? Is there external rotation of the shoulder used to make up for limited supination? 'Squeeze my fingers as hard as you can' (tests for grip strength). 'Touch the tip of each finger with your thumb' (tests most finger joints).
7. **Legs and hips:** Ask the patient to lie down on the bed. Look at leg length and, if suspicious, measure true leg length from the anterior superior iliac spine to the medial malleolus and apparent length from the umbilicus to the medial malleolus. Test knee flexion: 'Bend your knee and pull your foot up towards your bottom.' Meanwhile, put your hand on the patella and feel for crepitus. Test for osteoarthritis of the hip by internally rotating the hip. Flex the knee to 90° and move the foot laterally. Pain and limitation of movement occur early with osteoarthritis.
8. **Feet:** Look for arthritic changes, especially at the metatarsophalangeal joints, bunions, swelling, calluses etc.

The examination will have to be varied for very immobile patients, but with practice it can be performed rapidly. If a specific joint or group of joints is abnormal on screening, a more detailed targeted examination is indicated.



Dincolo de examenul clinic

➤ Anamneza

➤ Examen clinic

➤ In multe cazuri, ACESTEA se verifica cu criterii dg!



Dincolo de examenul clinic

- Teste de laborator
- Explorari imagistice
- In scopul CONFIRMARII diagnosticului



Teste de laborator

Autoanticorpi

➤ ANA:

- LES (95%),
- BMTC,
- sclerodermie,
- sd Sjogren,
- virstnici sanatosi (5%)
- ***Sensibil, ne-specific***

➤ ANA + → testare tip ANA:

- anti ADNdc
- anti U1-RNP
- anti-centromer



Teste de laborator

Alte testari

- Complement (C3 si C4)
 - LES,
 - vasculite
- HLA-B27:
 - Spondilita ankilozanta-90%
 - Sd Reiter-80%
 - Populatie sanatoasa-8%
- Teste nespecifice:
 - VSH, proteina C reactiva



Explorari imagistice

- Radiografie (Rgf, X-rays)
- Tomografie computerizata (CT scan)
- Imagistica prin rezonanta magnetica (IRM, MRI, RMN)
- Ecografie musculo-scheletala (MSK-US)
- Scintigrafie osoasa (Nuclear imaging)



Radiografia

➤ Poate vizualiza:

- Tumefactie parti moi
- Calcificari ligamentare, tendinoase, cartilaginoase
- Ingustarea spatiilor articulare

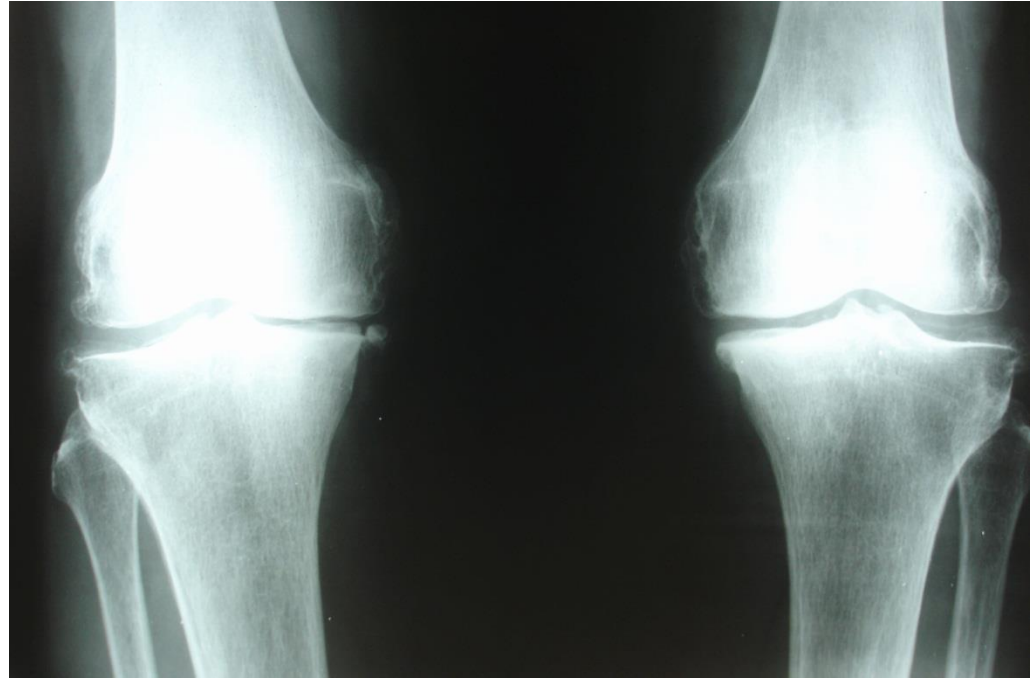


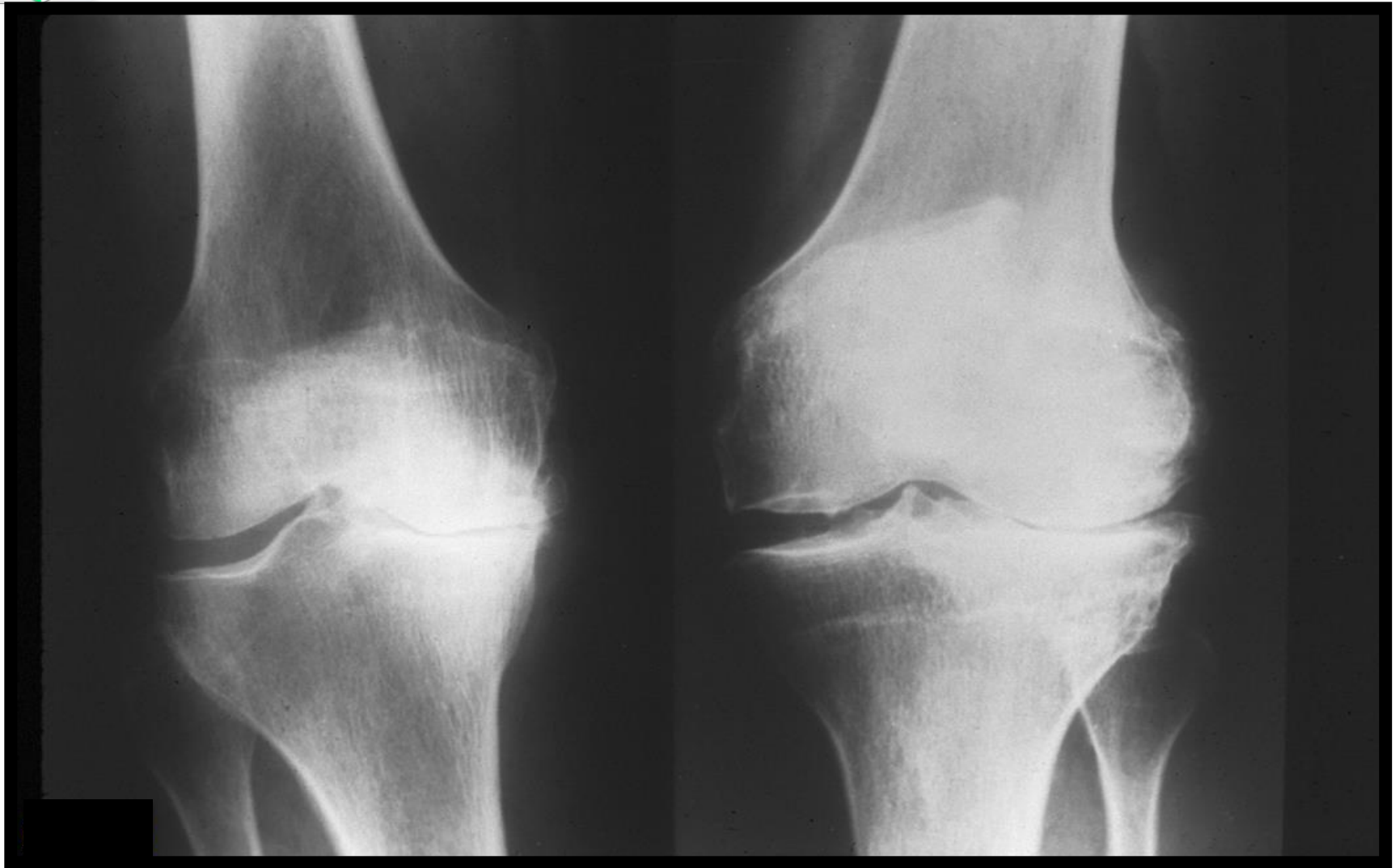
Radiografia

➤ Poate vizualiza:

- Deformari osoase
- Eroziuni osoase±proliferare osoasa
- Formare de os nou
- Modificari de densitate osoasa

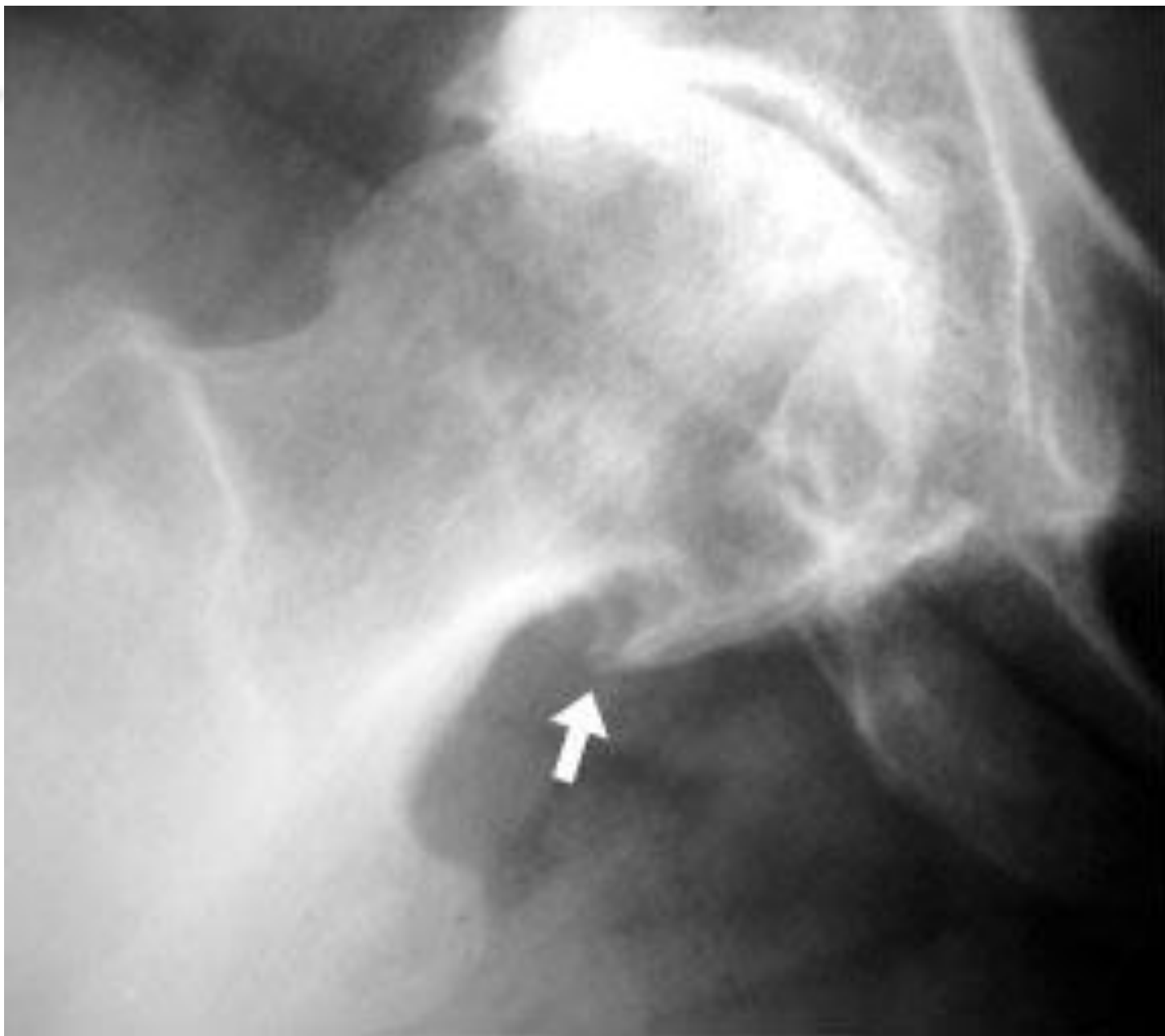




















Radiografie de genunchi normala:

- Spatiu articular pastrat
- Fara osteofitoza
- Fara condensare subcondrala
- Fara chiste
- Fara dezaxari



Radiografia

- **REGULA: NU se radiografiaza TOATE articulatatiile afectate !!!**
 - Cele mai suparatoare
 - Cele mai caracteristice ipotezei dg

- **Evaluezi informatia si pattern-ul afectarii !!!**



Radiografia

Avantaje

- Disponibila
- Ieftina
- Training “la scoala”

Dezavantaj

- Rezolutie limitata
- Informatii limitate privind tesuturile moi
- Vizualizeaza EXCLUSIV leziuni osase si tardive !!!

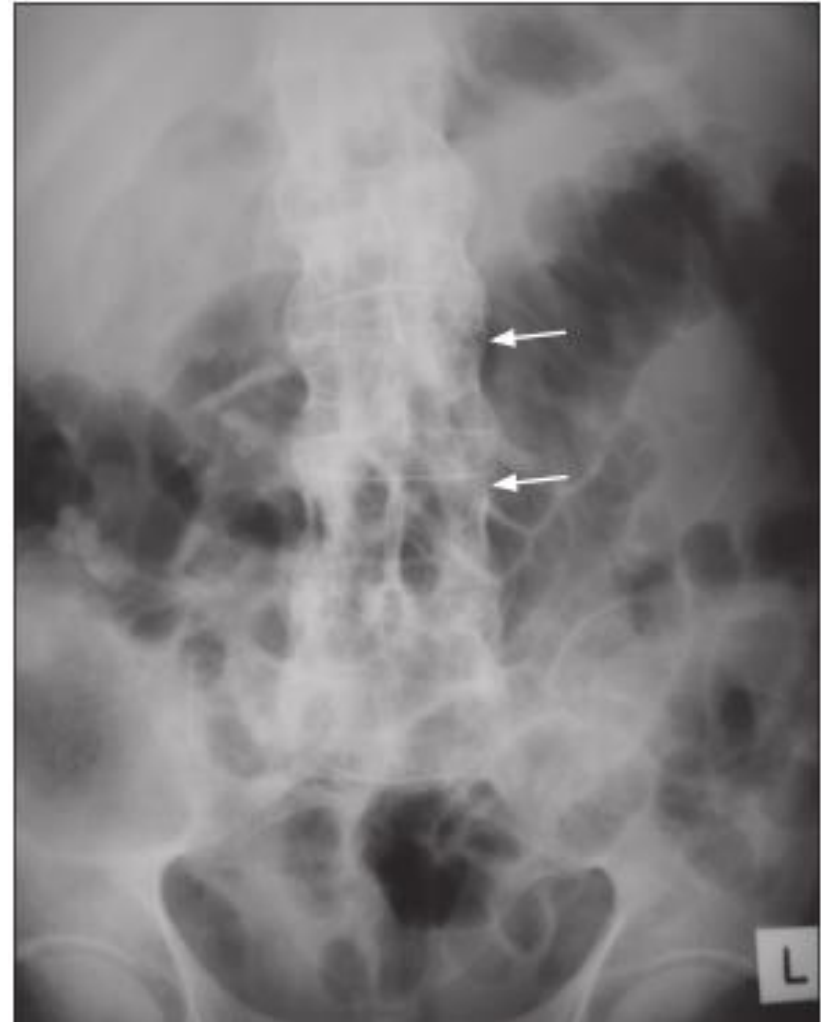
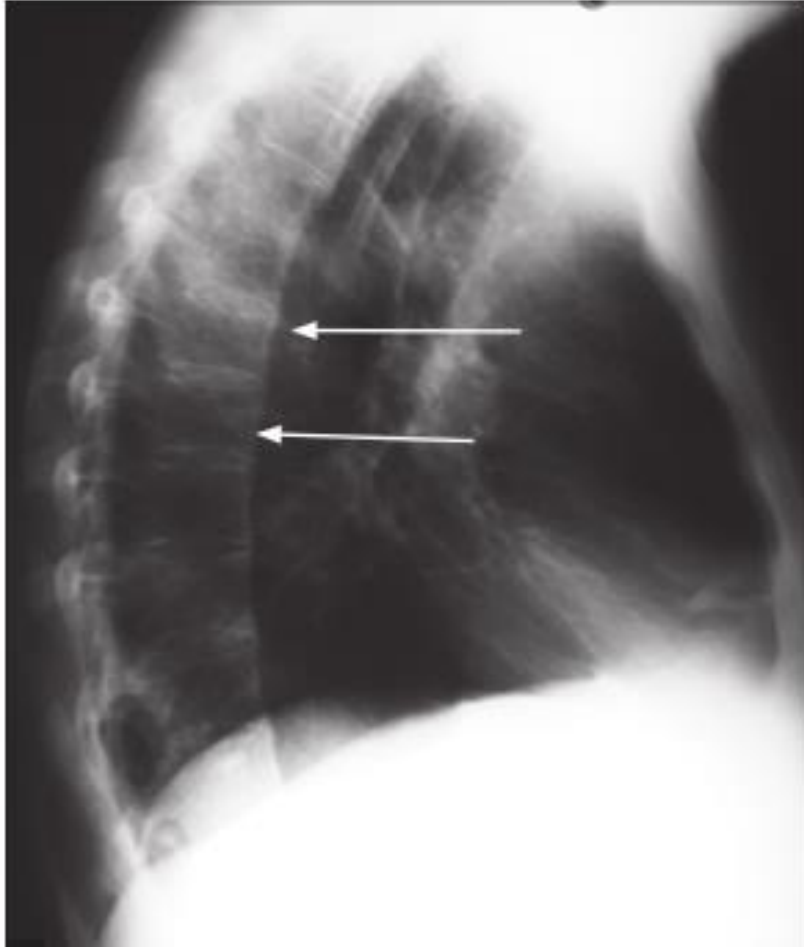


Citeva aspecte radiografice

- Spondilita ankilozanta
- Sd Reiter
- Artrita psoriazica
- Guta
- Poliartrita reumatoida



Spondilita ankilozanta



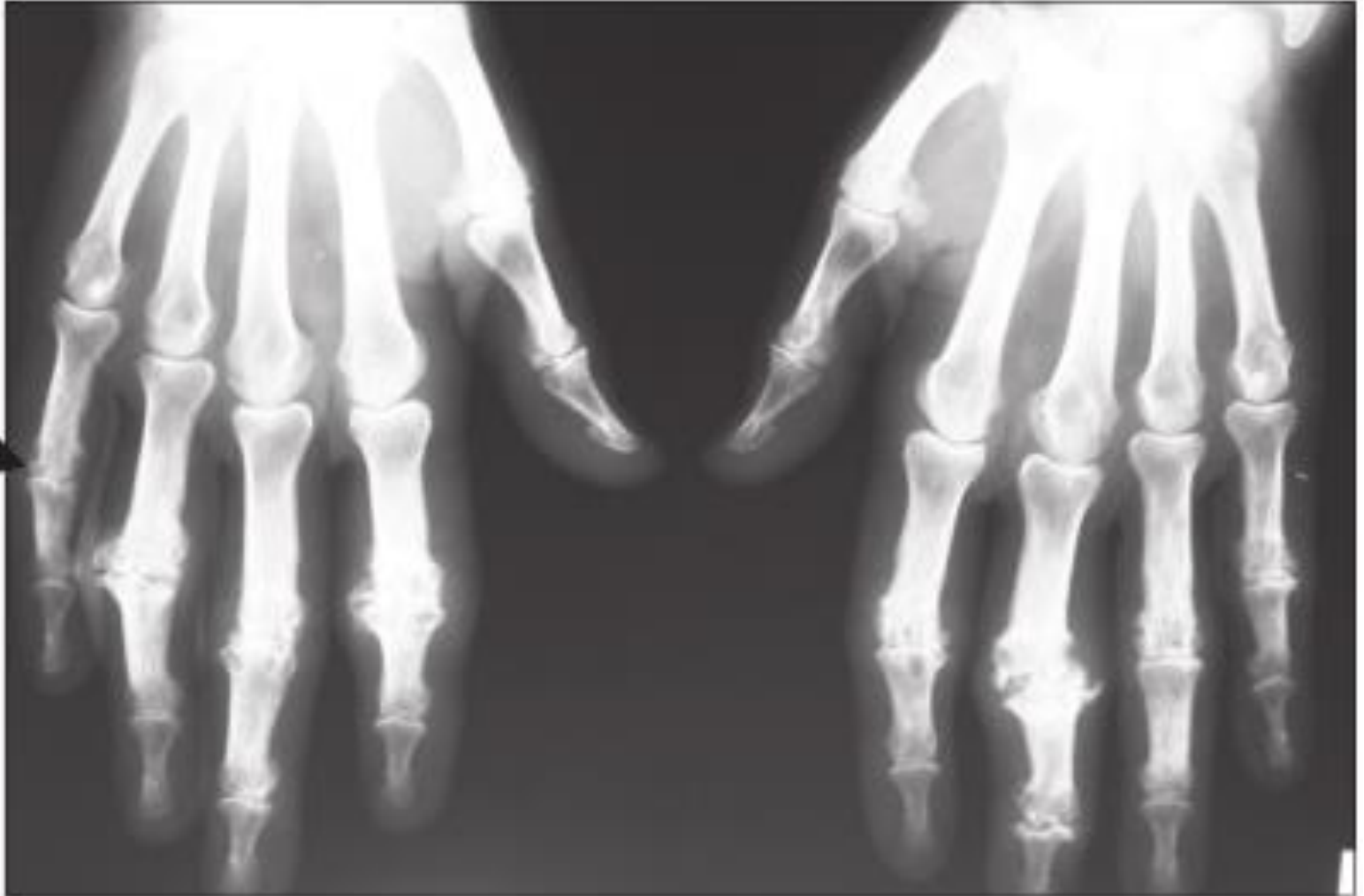


Sd Reiter





Artrita psoriazica



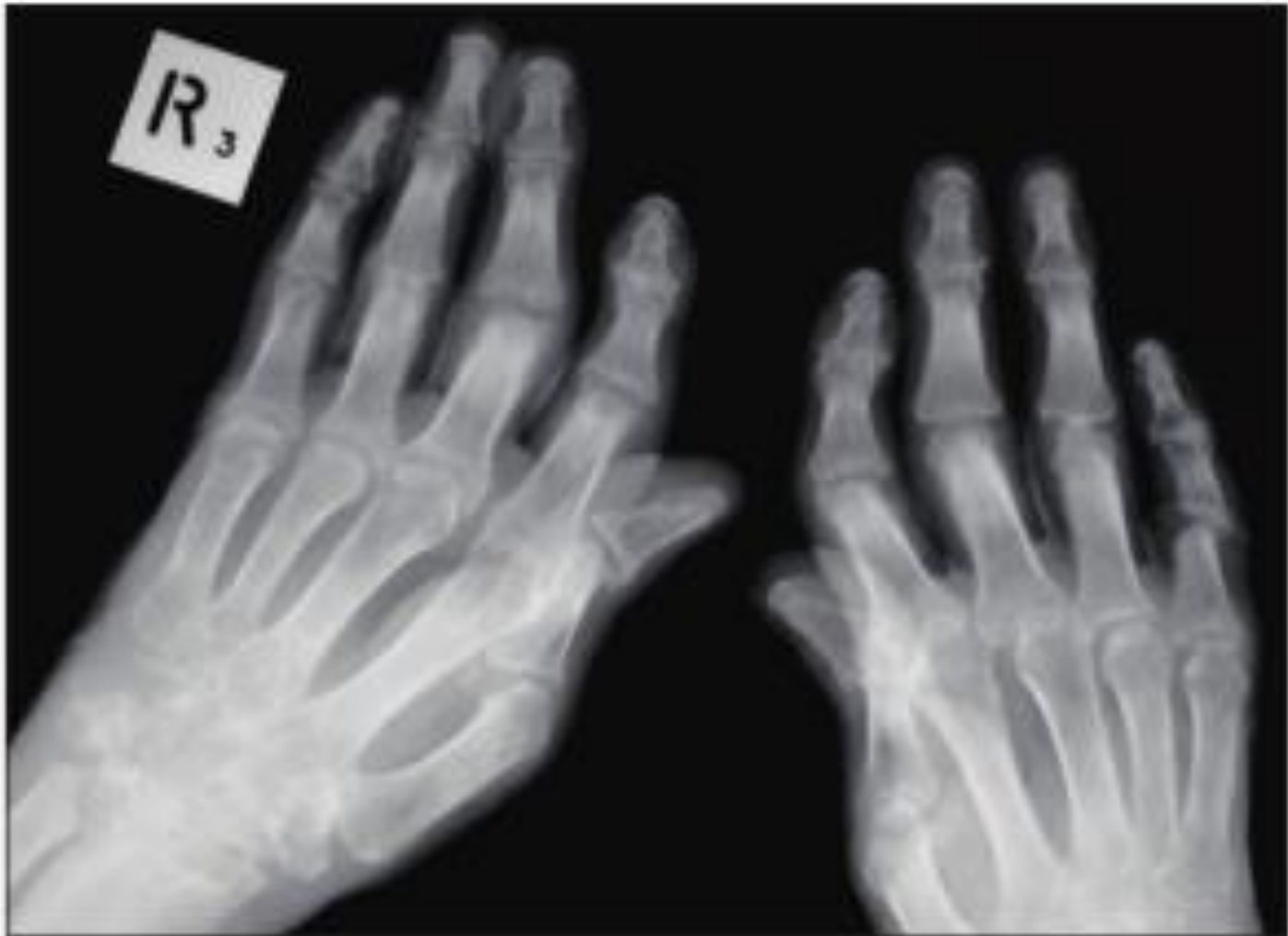


Guta





Poliartrita reumatoida





CT si IRM

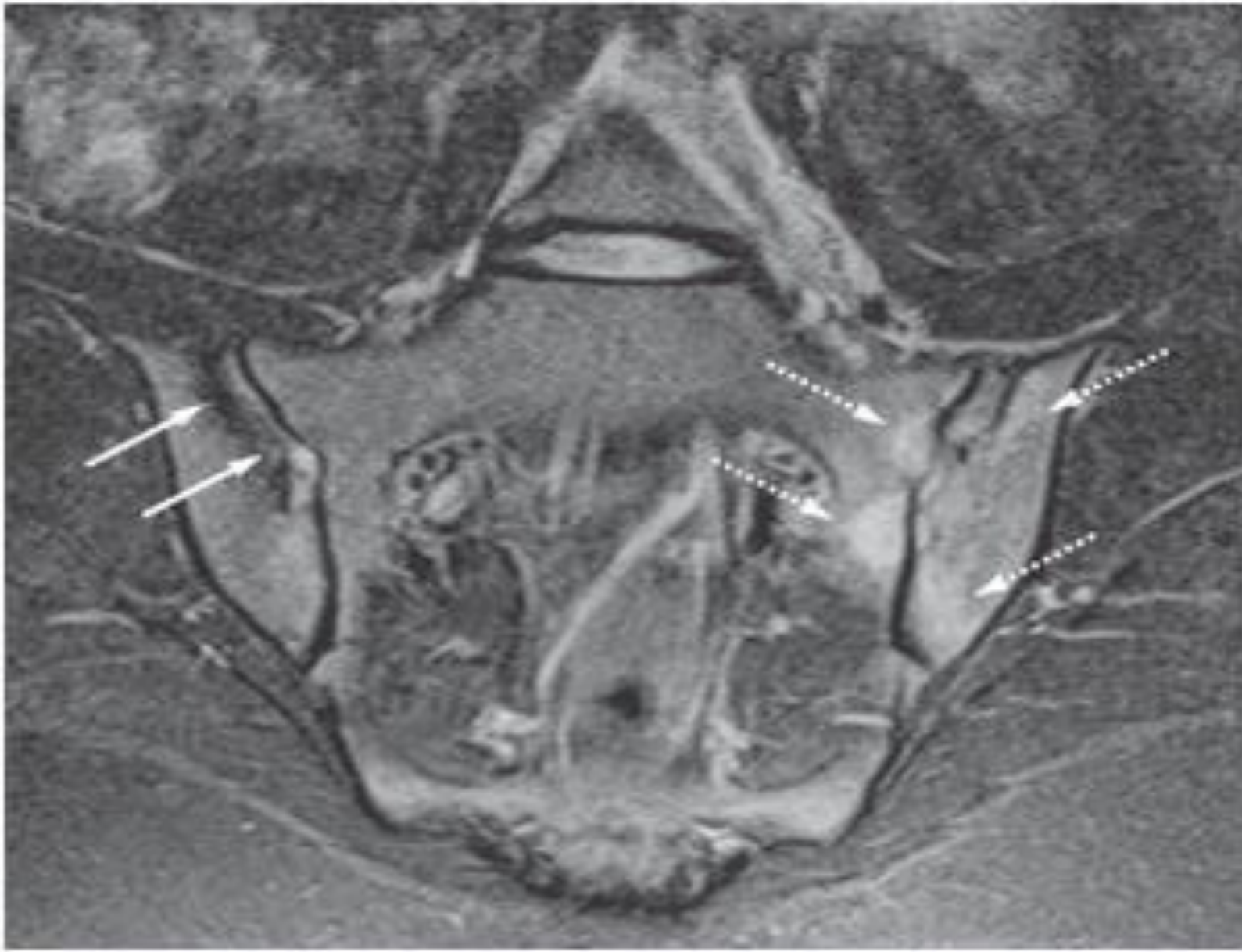
- CT iradiaza mult
- IRM e mai scump
- Ambele: info complexe si complete, adesea in 3D

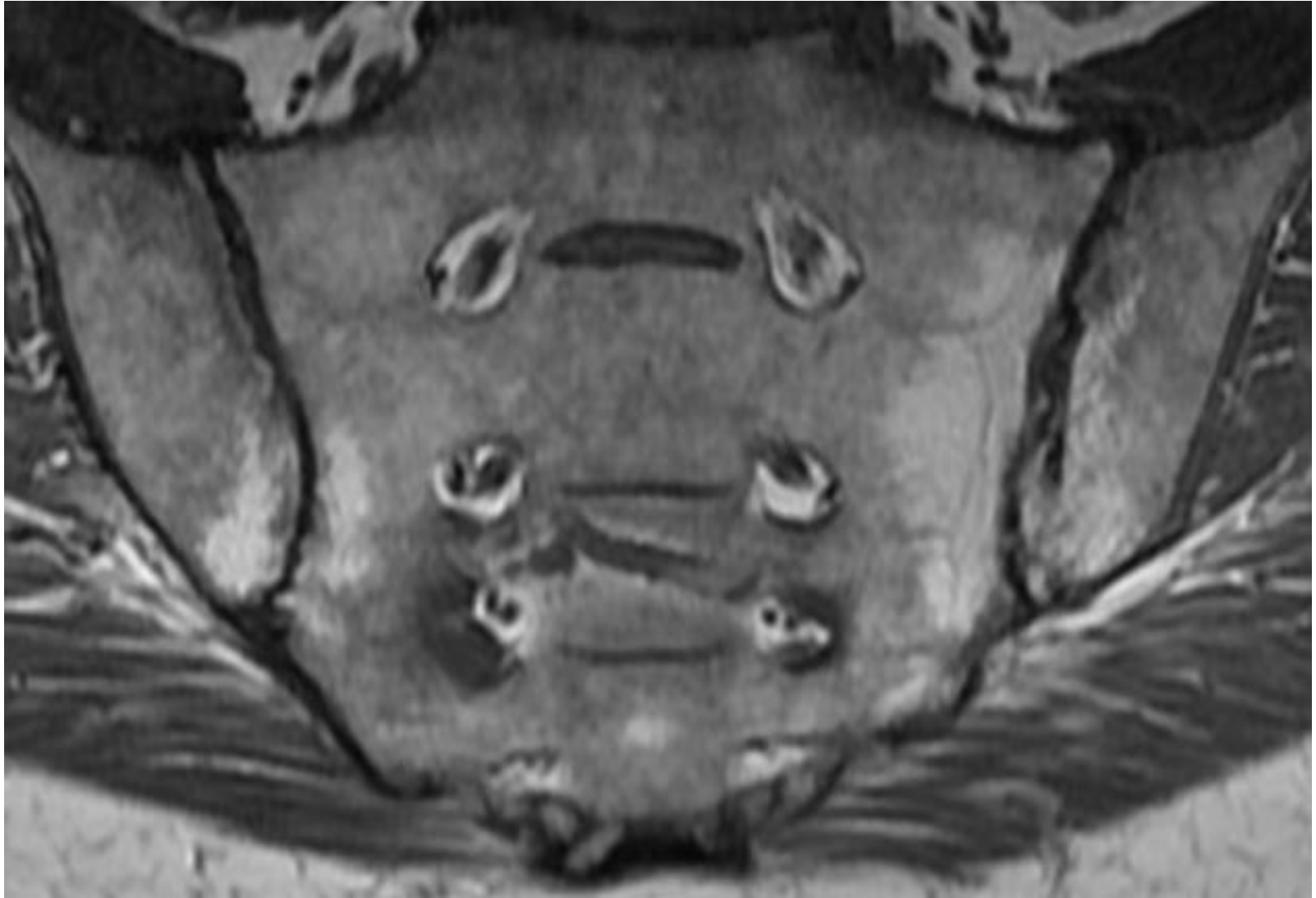


CT si IRM

➤ Utile pentru:

- Leziuni precoce (inaintea Rgf)
- Tesuturi moi (patologie bure, tendoane, muschi)
- Discuri intervertebrale
- Suspiciune de infectie articulara/tesuturi moi
- Suspiciune de malignitate
- Traumatisme







Radiografie de genunchi normala:

- Spatiu articular pastrat
- Fara osteofitoza
- Fara condensare subcondrala
- Fara chiste
- Fara dezaxari



Rezonanta Magnetica Nucleara

Avantaje

- Noninvaziva
- Rezolutie superioara radiografiei
- Vede si tesuturile moi
- De electie pentru cartilaj
- De electie pentru coloana vertebrala



Rezonanta Magnetica Nucleara

Dezavantaje

- Costisitoare
- Greu accesibila
- Limitari ale pacientilor (proteze, implanturi etc)
- Interventional - complicat

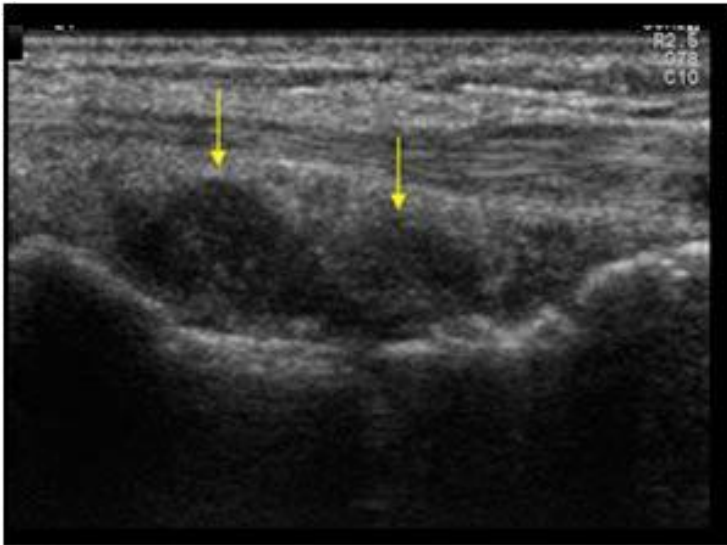


Ecografia musculoscheletala

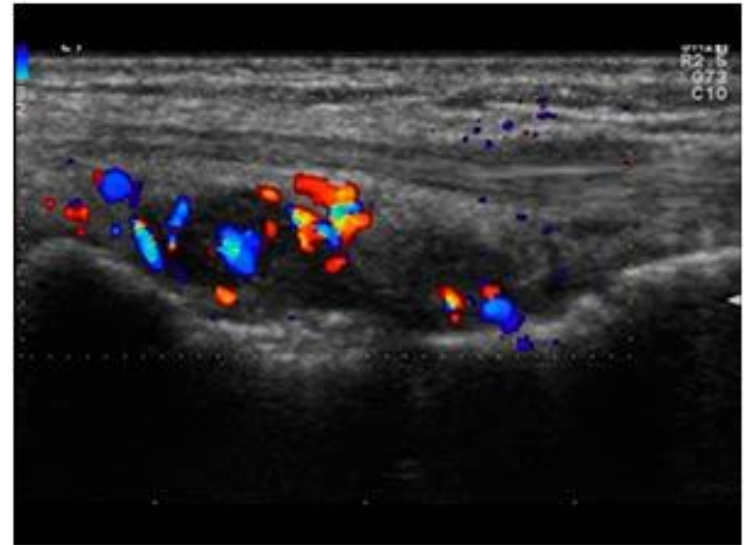
- Tot mai frecvent efectuata
- Poate stabili diagnostice inaintea radiografiei
- E mai ieftina decit CT/IRM
- La patul bolnavului



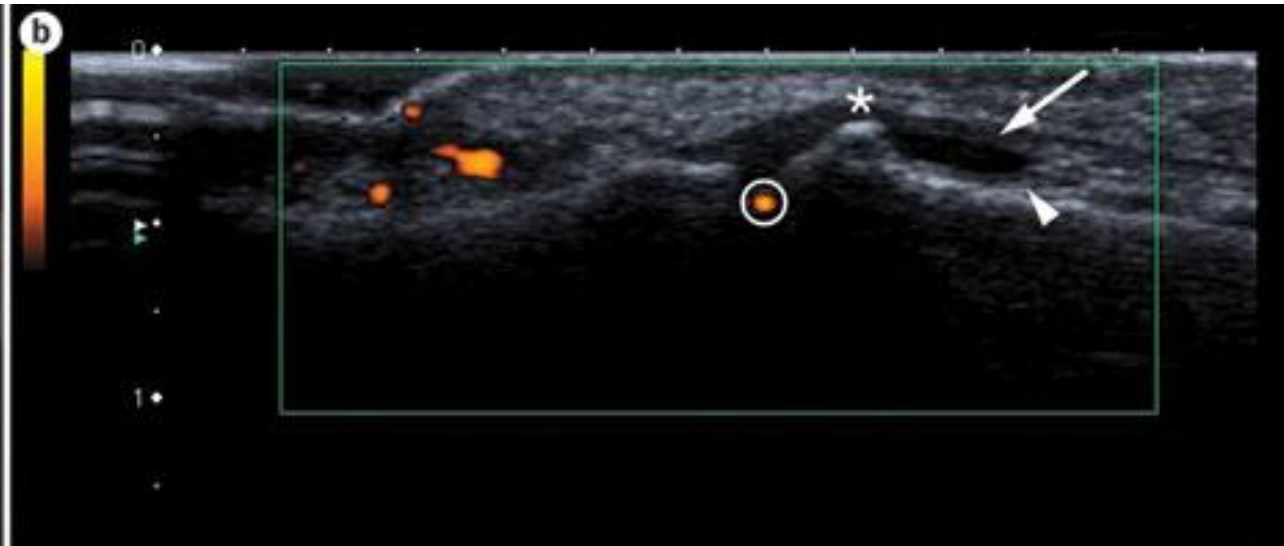
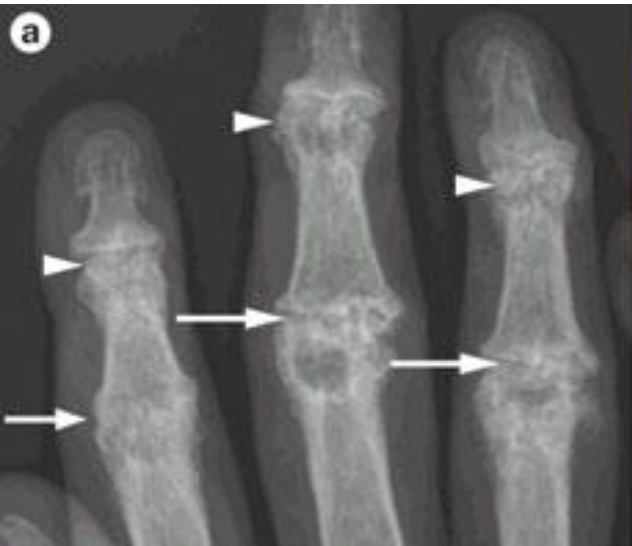
Poliartrita reumatoida



➤ Proliferare sinoviala
si lichid RCC =
SINOVITA

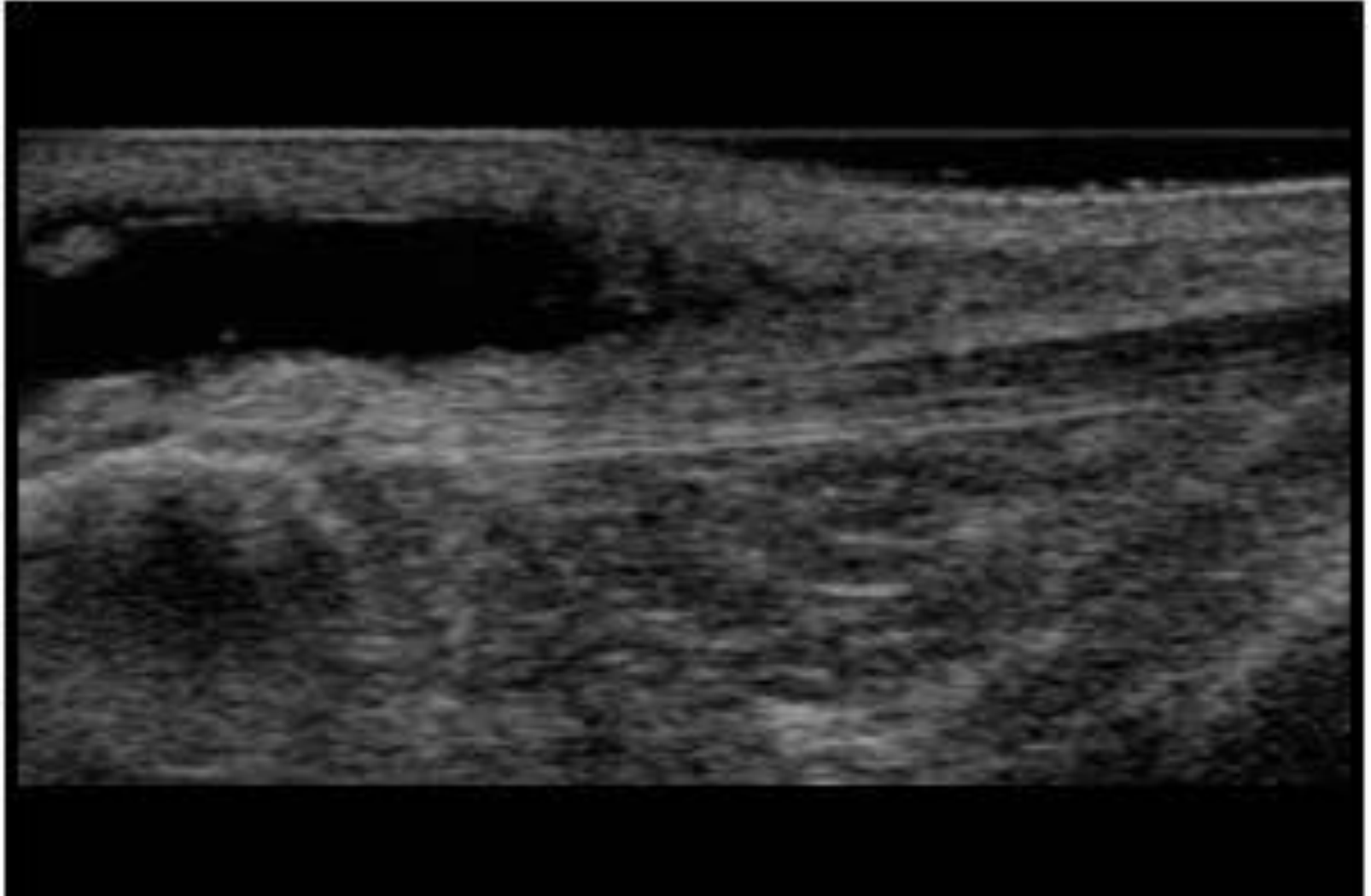


- Semnal Doppler prezent = sinovita ACTIVA



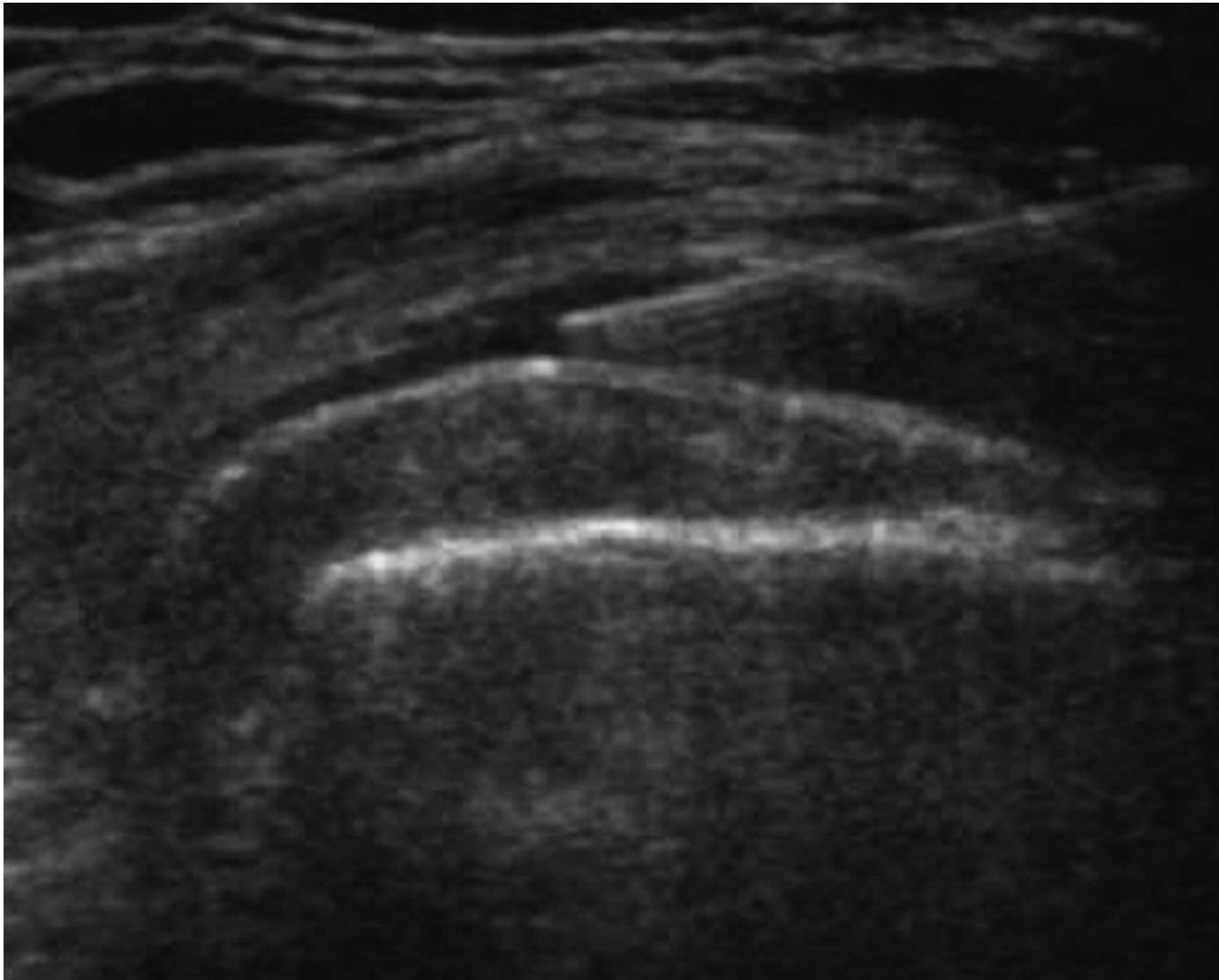


Bursita olecraniana





Ac in bursa SASD





SONOACE X4

Sp.Cl. Colentina Med.II | FPS 20D | 4.5cm | MI 1.0 | 28-02-2014
Small Parts | HL5-9ED | Gen. Tls 0.2 | 17:51:26

CINE 0 **M**

#255

1-
2-
3-
4-

hematom

maseter stg

[2D] G52 / P90
87dB / FA6
FSI2 / PGC0

2D

1 Auto Run | 2 One/Loop | 3 One Edit | 4 One Save | 5 Speed (%)



SONOACE
X4

Sp.Cl. Colentina Med.II
Musculoskeletal

FPS 15D
HL5-9ED

4.0cm MI 1.0
Gen. TIs 0.2

08-05-2014
12:20:20

CINE 0 M



#124

0

1

2

3

4



[2D] G89 / P90
87dB / FA5
FSI2 / PGC0

2D

1 Auto Run 2 One/Loop 3 One Edit 4 One Save 5 Speed (%)



SONOACE
X4

Sp.Cl. Colentina Med.II
Small Parts

FPS 20D
HL5-9ED

4.5cm MI 1.0
Gen. TIs 0.2

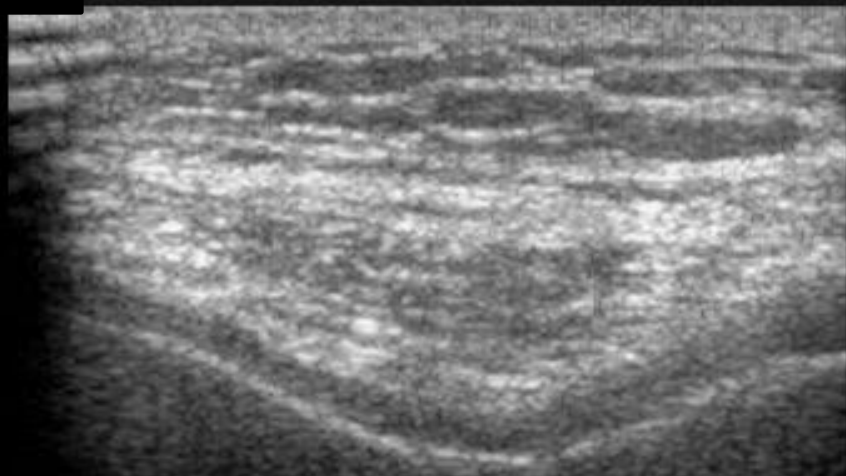
02-04-2014
08:44:07

CINE 0

M

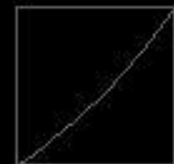
#255

[2D] G63 / P90
87dB / FA6
FSI2 / PGC0



cart femur dr

2D



1 Auto Run 2 One/Loop 3 One Edit 4 One Save 5 Speed (%)



SONOACE
X4

Sp.Cl. Colentina Med.II
Musculoskeletal

FPS 16D
HL5-9ED

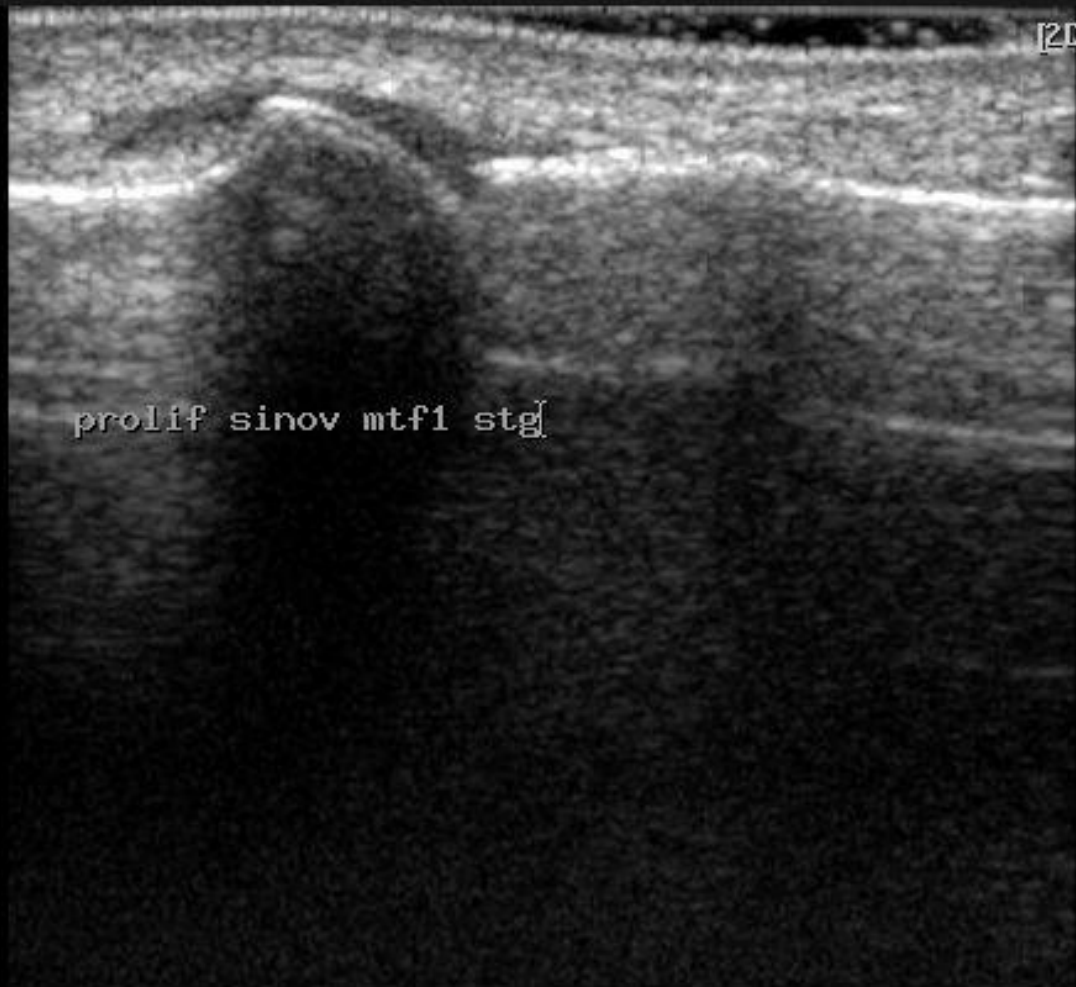
3.5cm MI 1.0
Gen. TIs 0.2

19-05-2014
11:42:06

CINE 0 M



#255



[2D] G68 / P90
87dB / FA5
FSI2 / PGC1

2D

1 Auto Run 2 One/Loop 3 One Edit 4 One Save 5 Speed (%)



SONOACE
X4

Sp.Cl. Colentina Med.II
Musculoskeletal

FPS 14D
HL5-9ED

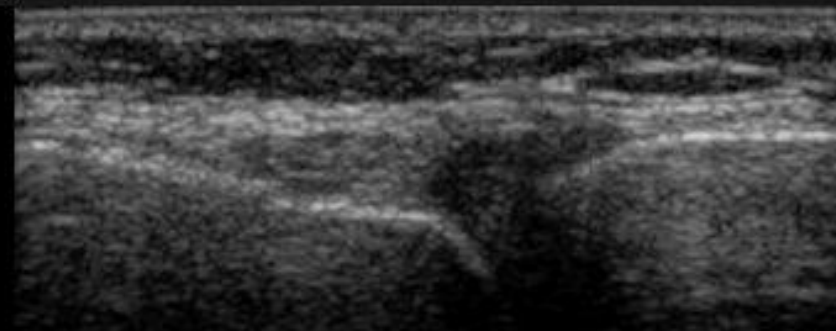
4.5cm MI 1.0
Gen. TIs 0.2

01-09-2014
12:58:36

CINE 0 M



#255

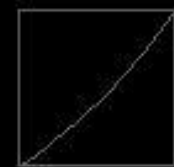


[2D] G52 / P90
87dB / FA5
FSI2 / PGC0

comp medial gen dr-menisc protruzionat



2D



- 1 Auto Run
- 2 One/Loop
- 3 One Edit
- 4 One Save
- 5 Speed (%)



SONOACE
X4

Sp.Cl. Colentina Med.II
Musculoskeletal

FPS 14D
HL5-9ED

4.5cm | MI 1.0
Gen. TIs 0.2

01-09-2014
13:02:16

CINE 0

M



#255

1

2

3

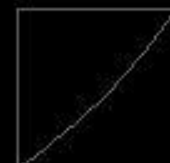
4

2D



[2D] G53 / P90
87dB / FA5
FSI2 / PGC0

revarsat gen stg reces suprapatelar



1

Auto Run

2

One/Loop

3

One Edit

4

One Save

5

Speed (%)



SONOACE X4 | Sp.Cl. Colentina Med.II | FPS 20D | 4.5cm | MI 1.0 | 21-08-2014
Small Parts | HL5-9ED | Gen. TIs 0.2 | 10:17:23

CINE 0 M
#255
1
2
3
4

[2D] G66 / P90
87dB / FA6
FSI2 / PGC0

COLECTIE ? I

2D

1 Auto Run | 2 One/Loop | 3 One Edit | 4 One Save | 5 Speed (%)



SONOACE X4

Sp.Cl. Colentina Med.II FPS 25D 3.0cm MI 0.9 27-03-2014
Small Parts HL5-9ED Gen. TIs 0.2 12:36:30

CINE 0

#255

[2D] G57 / P90
87dB / FA6
FSI2 / PGC0

median drept 31mm2
confirmat EMG

1
2
3

2D

1	Auto Run	2	One/Loop	3	One Edit	4	One Save	5	Speed (%)
---	----------	---	----------	---	----------	---	----------	---	-----------



SONOACE
X4

R11
razvan

Sp.Cl. Colentina Med.II
Musculoskeletal

FPS 16D
HL5-9ED

3.5cm MI 1.0
Gen. TIs 0.2

29-04-2014
12:01:35

CINE 0 M

#255

1
2
3



[2D] G77 / P90
87dB / FA5
FSI2 / PGC0

2D

1 Auto Run 2 One/Loop 3 One Edit 4 One Save 5 Speed (%)



Ecografia articulara

Avantaje

- Rapida
- **IN TIMP REAL**
- Dinamica
- Permite interventii
- Vizualizeaza leziuni inaintea Rgf

Dezavantaje

- Scumpa
- Vizualizeaza doar “non-oase”
- Training special, de durata



Scintigrafia osoasa

- Tc^{99m} metastabil sau Tc-bisfosfonat
- De obicei, atunci cind altfel n-ai dg:
 - Metastaze osoase
 - Infectii osoase/articulare
 - Fracturi de stress
 - Extensie boala Paget



Pe scurt :

- GALT – evaluare rapida a mobilitatii articulare
- Pattern-ul modificarilor Rgf ajuta diagnosticul
- Info IRM (si CT): TOATE structurile, precoce (< Rgf)
- Citeodata, scintigrafia osoasa poate fi utila