

SHOULDER PAIN

The surgeon's point of view

J. Grimberg
IRCOS, Paris, France

WHAT IS PAIN ?

- Webster medical dictionary : " An unpleasant sensation that can range from mild, localized discomfort to agony. Pain has both physical and emotional components"
- International Association for the Study of Pain (IASP) : "An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage"

PLAN

- WHAT IS NOT PAIN !
- SHOULDER'S PAIN : the paths to diagnosis
- WHAT IS (usually!) SIMPLE
- WHAT IS (usually!) MORE DIFFICULT
- WHAT IS VERY DIFFICULT
- CONCLUSION

WHAT IS NOT PAIN

WHAT IS NOT PAIN !

- STIFFNESS
- INSTABILITY

STIFFNESS

- Limitation of PASSIVE movements of the shoulder
- Is NOT pain !
- But may be painful if you try to move actively or passively beyond the range of passive mobility

INSTABILITY

- Is NOT pain !
- But may be painful....or NOT !



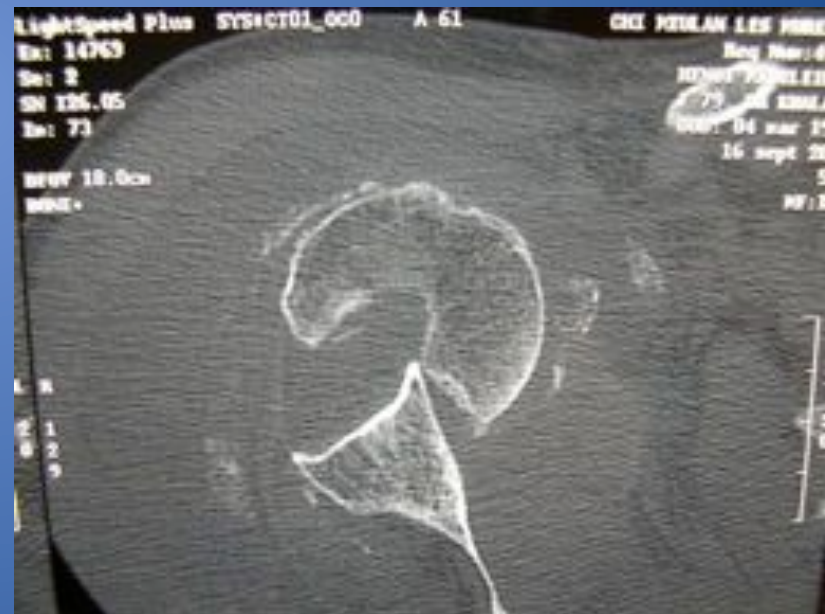
PAIN+STIFFNESS

- In all passive movements : CAPSULITIS
- In a particular direction : locking mechanism
 - Foreign body
 - Fracture sequelae
 - Arthrosis
 - Locked dislocation

PAIN + STIFFNESS



PAIN + STIFFNESS



PAIN + STIFFNESS

GAUCHE



PAIN + STIFFNESS



SALFORD, 2011

PAIN + INSTABILITY

- Pain only DURING dislocation or subdislocation episode = isolated instability
- Residual pain BETWEEN each dislocation or subdislocation episode = instability + something else :
 - Arthrosis
 - Cuff tear or cuff impingement
 - Neurological problem

SHOULDER'S PAIN : THE PATHS TO DIAGNOSIS

ASK AND LOOK

- ASK :
 - Age, sex, type of work, type and level of sports.
 - Symptoms : Is Pain the only symptom ?
- LOOK
 - How is the patient using his shoulder ...while undressing in front of you for example
 - From BEHIND the patient ++ : muscle atrophy (IS), scapular malalignment

PAIN CHARACTERISTICS

- ONSET :
 - When : chronic or acute
 - How : trauma, overuse, sport practice, unusual gesture.
- LOCATION :
 - Around the shoulder alone ?
 - Diffusion to another place : show with patient's finger
 - Onset around the shoulder or elsewhere ?

PAIN CHARACTERISTICS

- DAY AND/OR NIGHT PAIN ?
 - Night pain : inflammatory process
 - End of the day pain : mechanical process
 - Morning pain getting better : arthrosis.
- CONTINUOUS OR DISCONTINUOUS PAIN ?
 - Usually initially discontinuous and become continuous with time

PAIN CHARACTERISTICS

- ASSOCIATION WITH :
 - Movements :
 - Dislocation movements
 - Weight lifting
 - Overhead activity
 - Neurologic « signs » :
 - Look for real neurologic signs
 - Dysethesia or numbness of upper arm...to fingers is NOT ALWAYS FROM REAL NEUROLOGIC ORIGIN

PAIN CHARACTERISTICS

- HOW MUCH ? VISUAL ANALOGIC SCALES
 - Constant score : 0-15 but reverse the numbers....
- End with SIMPLE patient based subjective questionnaires or scores :
 - Simple Shoulder Test
 - Subjective Shoulder Value

PATIENT'S EXAMINATION

- BILATERAL active and passive mobility
- CUFF related signs :
 - Jobe : supraspinatus
 - Hawkins : non specific
 - Yocum++: very sensible for cuff disease
 - Neer, Palmup : bof...
 - Liftoff : only if big subscap tears
 - Belly off test, Belly press test, Bear hug test : subscap tear???

PATIENT'S EXAMINATION

- INSTABILITY related signs:
 - The best one : APPREHENSION ++ in ABD-ER
 - Pain in ADD-IR-Retropulsion : posterior instability
 - All others (Kim, Andrews.....) : bof.....
- SLAP lesion : is there any real specific clinical sign ?.....
- STRENGTH : with something simple....

PATIENT'S EXAMINATION

- Your clinical examination **MUST** allow you to build a usual score for **YOUR OWN PRACTICE**
MID AND LONG TERM EVALUATION
 - Constant score for cuff and arthrosis problems
 - Walch-Duplay score for instability.
- Other scores : if the patients is involved in particular study

EXAMS

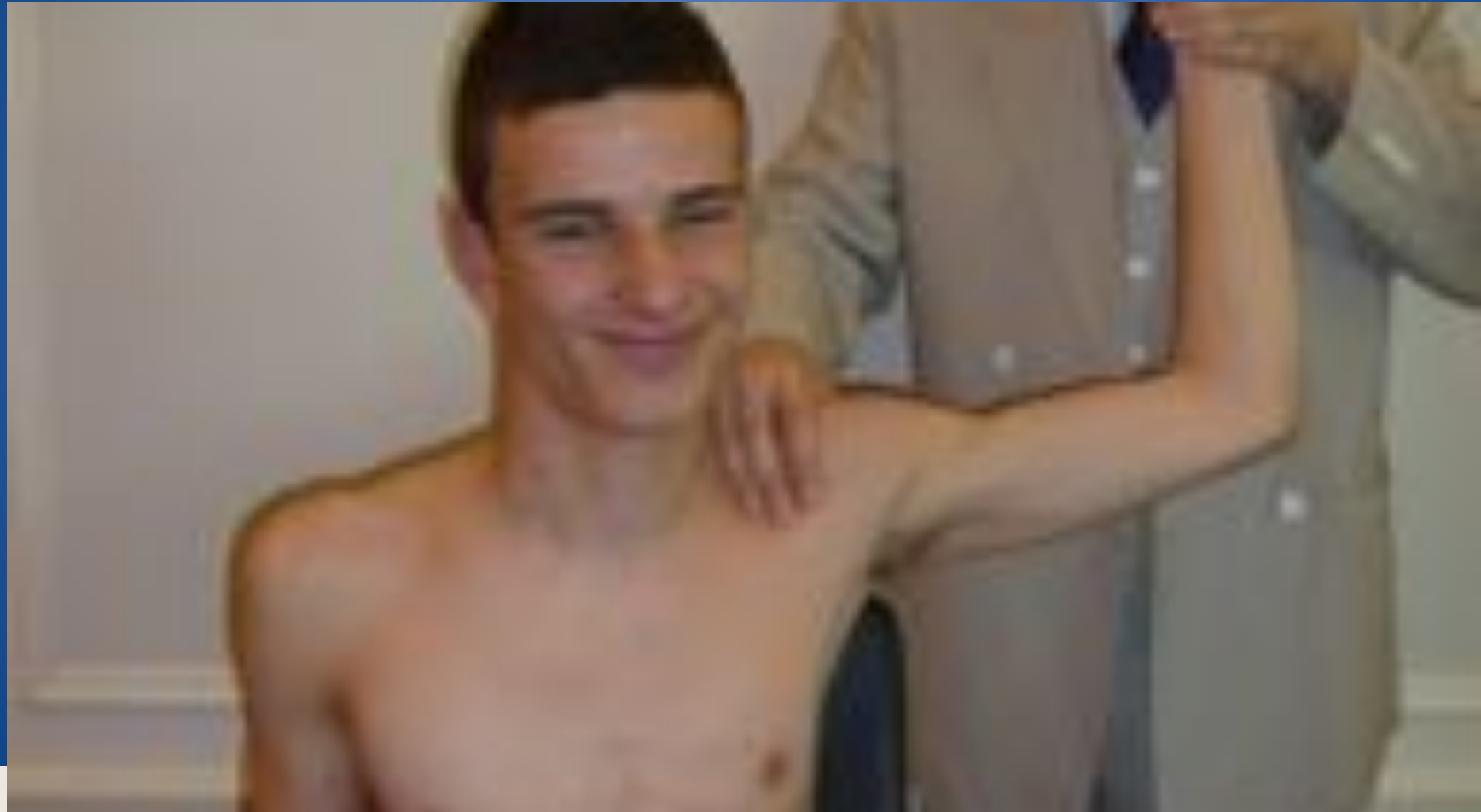
- X RAYS : ALWAYS !
- MRI : Why ? Get an arthroMRI !
- CT SCAN : I AM A FAN !
- ECHOGRAPHY : A question of philosophy

WHAT IS (usually) SIMPLE

EASY CASES

- 20 years old
- Volley ball player
- First shoulder anterior dislocation at the age of 16
- 10 dislocations since...
- Normal active and passive movements
- Apprehension test in ABD-RE+++

EASY CASES

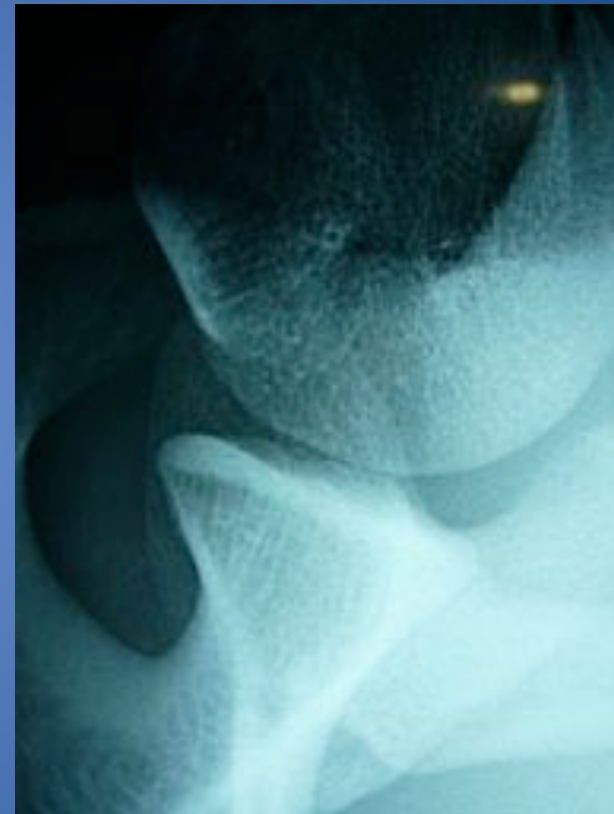
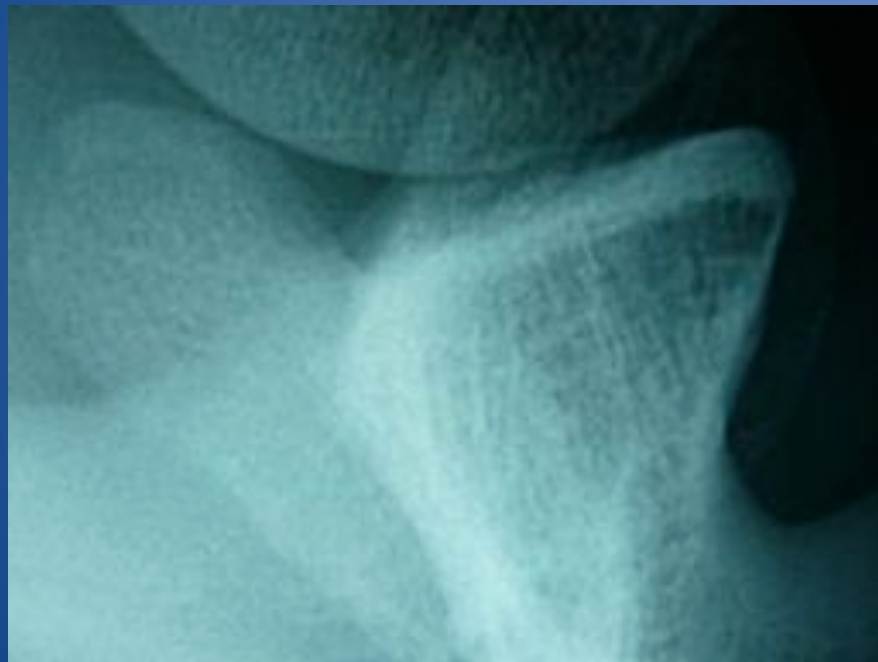


CONFIRM DIAGNOSIS WITH

- X RAY
- Arthro CT or Arthro MRI

EASY CASES





EASY CASES

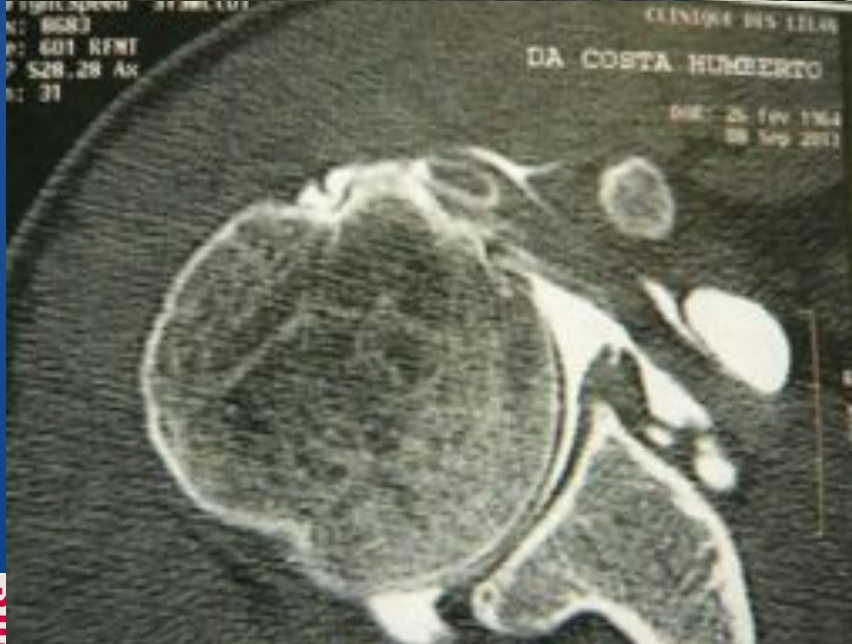
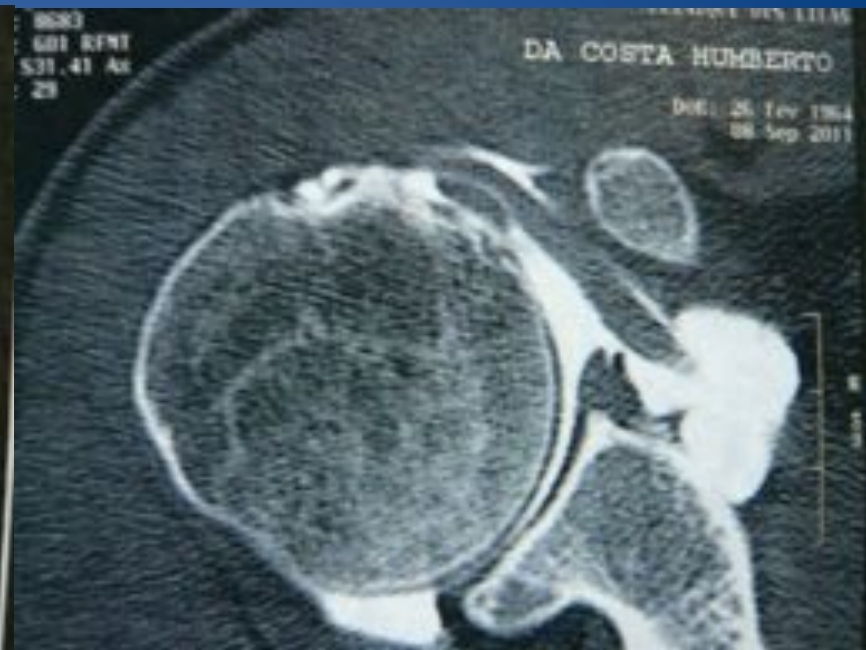


EASY CASES

- 60 years old
- Manual worker since the age of 20
- Progressive onset of mainly night pain
- Not able to lift weight anymore
- Normal passive movements, slight limitation of active movements
- Cuff signs + : Jobe, Hawkins, Yocum....

CONFIRM DIAGNOSIS WITH

- Arthro CT or arthro MRI : best before surgery
- Echography : not enough for precise diagnosis, unless very specialised radiologist



WHAT IS (usually!) MORE DIFFICULT

DIFFICULT DIAGNOSIS

- INTRICATED CASES
 - Cuff lesion + AC joint pain
 - Cuff lesion + suprascapular nerve impingement
 - Cuff lesion + instability

IN DIFFICULT CASES, USE...

- Xylocaïne infiltration as diagnosis tool :
 - If relieves pain in AC joint, the joint may be the problem.
- EMG as a diagnosis tool :
 - For suprascapular nerve palsy
 - For cervical pain from neurological origin
- RE EXAMINATION OF YOUR PATIENT
CLINICALLY +++++

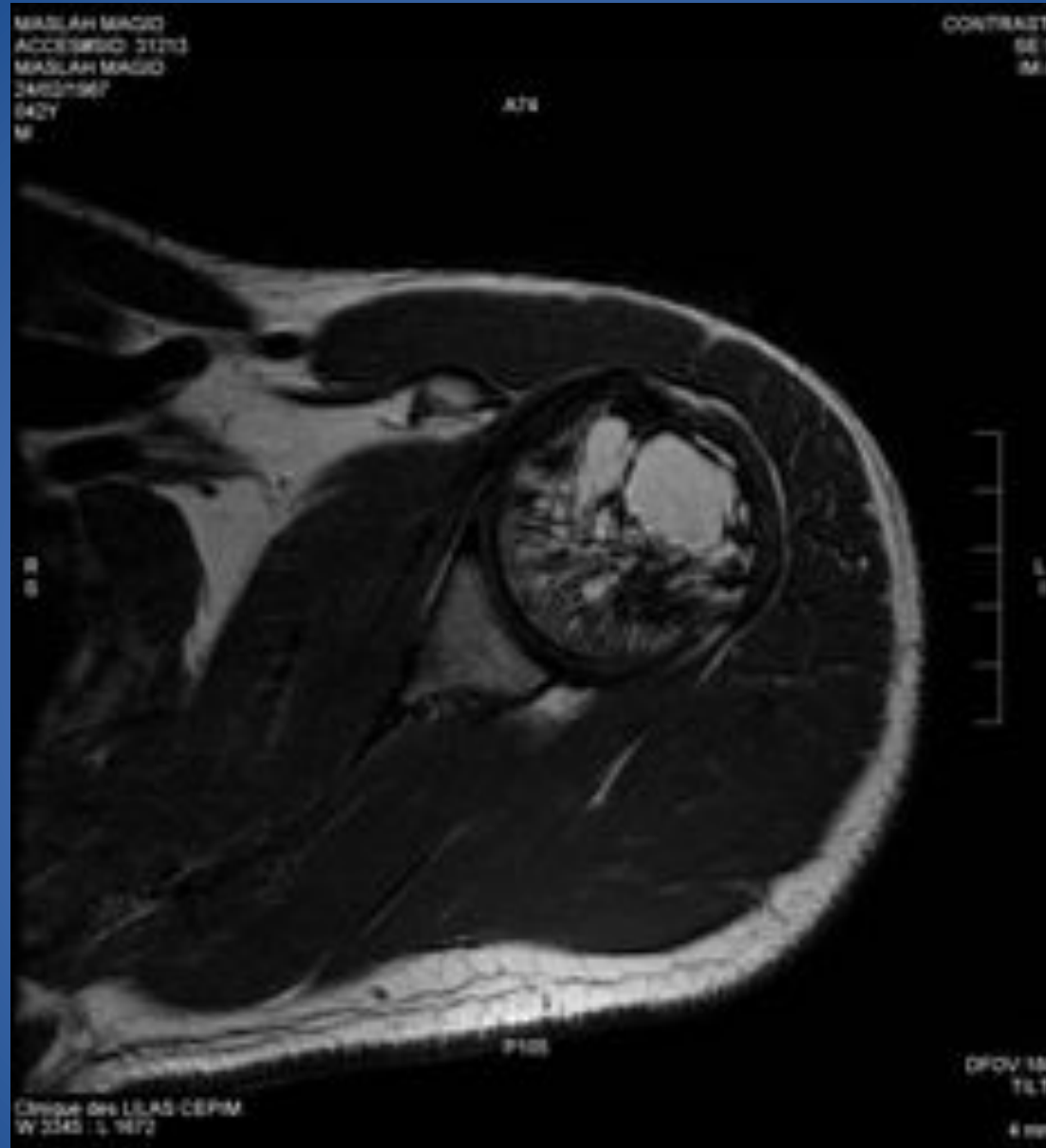
WHAT IS VERY DIFFICULT !!

The rare diagnosis you should not miss.....

- TUMORS : malignant : X ray-MRI-CT
 - Lady with recent or even old breast cancer : think about metastases
 - Young patient, unilateral persistent pain resisting to usual pain killer : osteosarcoma, chondrosarcoma.
- TUMORS : non malignant : MRI-CT
 - Osteoid osteoma
- OTHERS : Paget's disease..

WHAT IS YOUR DIAGNOSIS ?

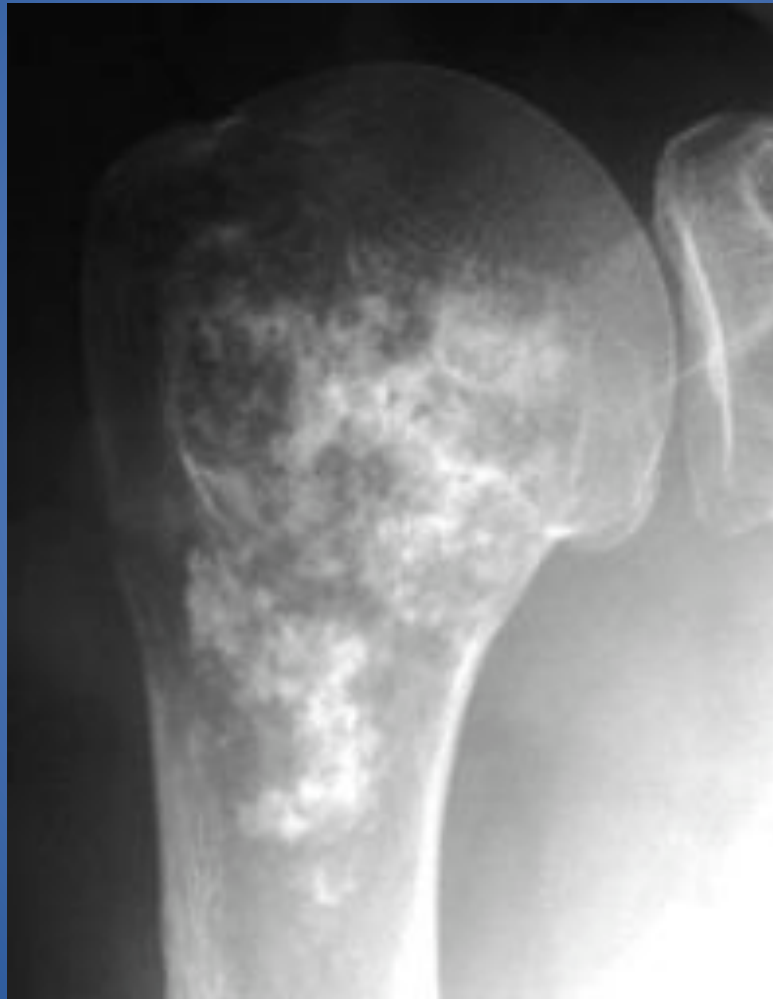


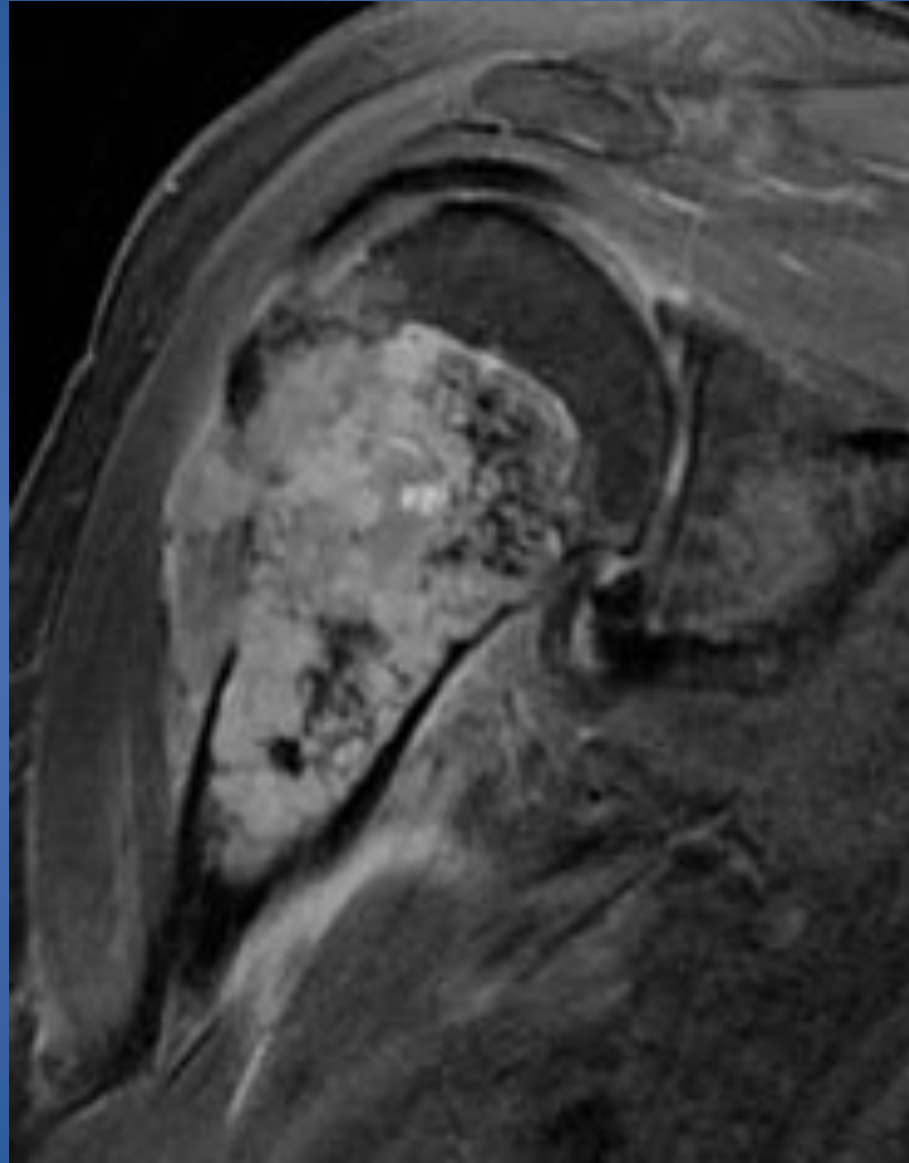


PAGET'S DISEASE

SALFORD, 2011

WHAT IS YOUR DIAGNOSIS ?





CHONDROSARCOMA

SALFORD, 2011

The rare diagnosis you are allowed to miss....not for too long !

- Multidirectionnal instability with normal arthroCT
 - Everything relies on clinical examination and...
 - Arthroscopy
- Snapping scapula
- Scapular dyskinesia

MULTIDIRECTIONAL INSTABILITY



The nightmare of shoulder surgeon

- Worker 's compensation pain
- Psychiatric cases

- ARE NOT ALWAYS EASY TO DIAGNOSE ... and TO AVOID !!

CONCLUSION

- If you awake in the morning after the age of 50 without feeling any kind of pain....

BEWARE, YOU ARE CERTAINLY DEAD !!

QUIZZ

- ABOUT SHOULDER PAIN (YES ?/NO ?)
 - Dysesthesia in the fingers is usually from neurological origin
 - Is allways present between each dislocation episode in chronic anterior shoulder instability
 - Night pain is common in cuff related disease
 - Non adressed AC joint disease is a usual cause for residual pain after cuff repair

QUIZZ : answers

- ABOUT SHOULDER PAIN
 - Dysesthesia in the fingers is usually from neurological origin : NO
 - Is always present between each dislocation episode in chronic anterior shoulder instability : NO
 - Night pain is common in cuff related disease : YES
 - Non adressed AC joint disease is a usual cause for residual pain after cuff repair : YES