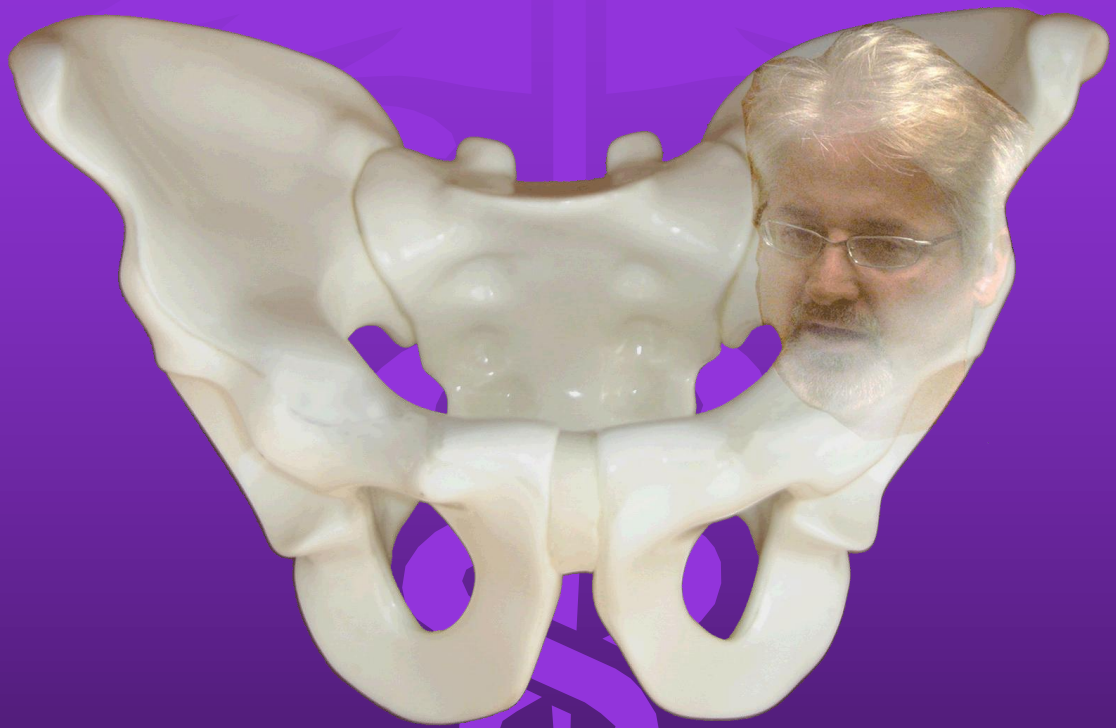
Kyle F. Dickson, M.D. M.B.A.



Professor Baylor College of Medicine
Southwest Orthopaedic Group, Houston, Texas
kyledickson99@gmail.com cell 713-208-4168

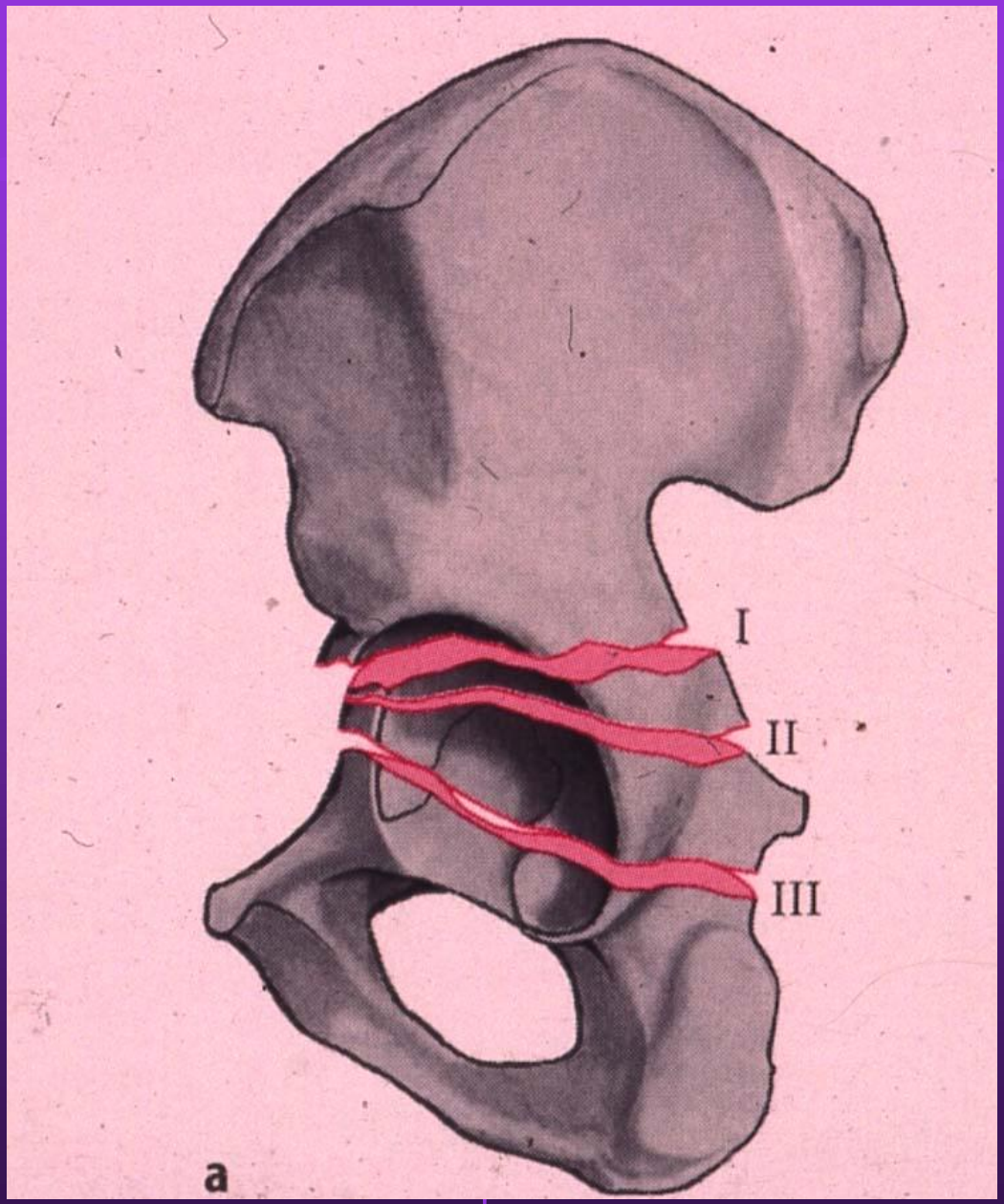
Indications for ORIF of Acetabular Fractures – 10 Minutes

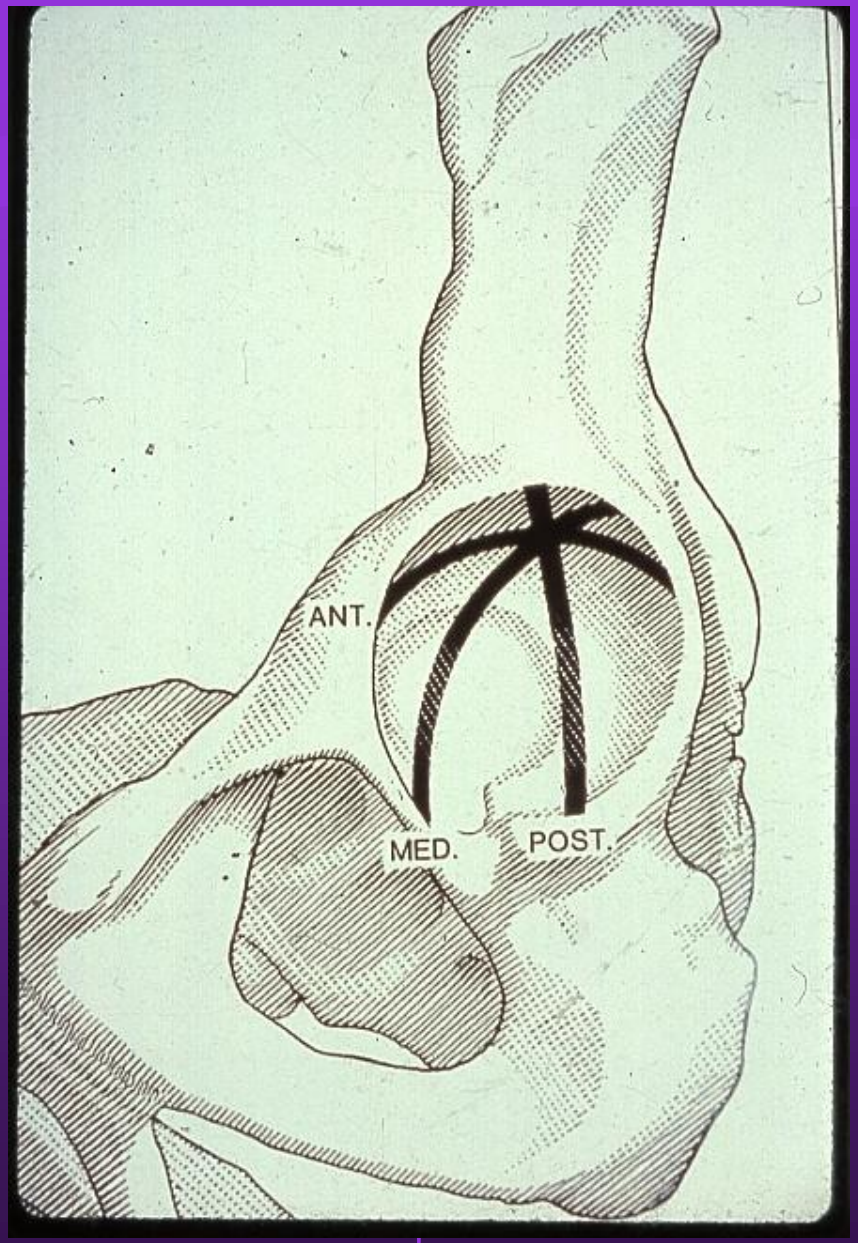
Indications For Treatment of Acetabular Fractures

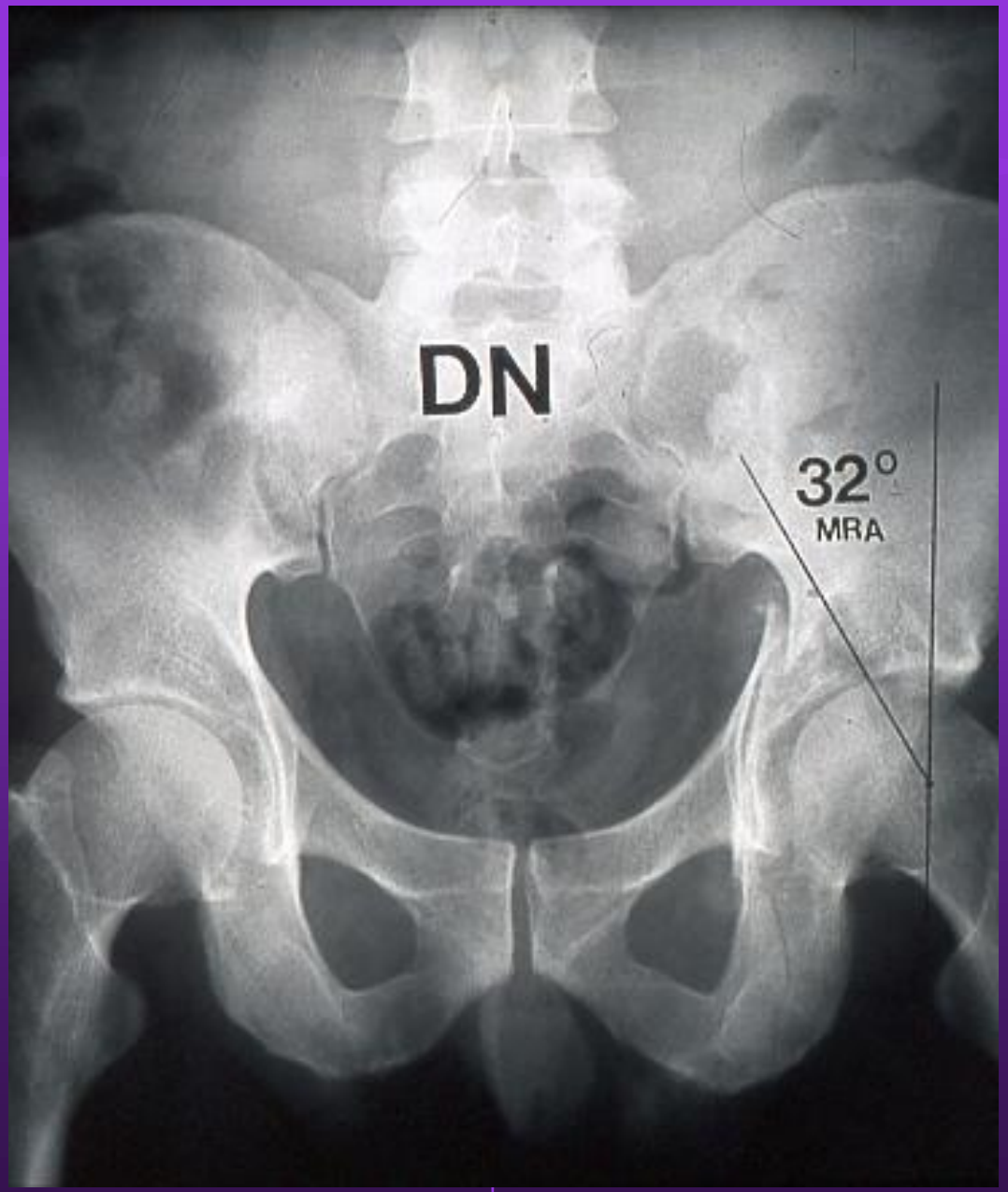
Kyle Dickson MD, MBA
Professor Baylor College of Medicine
Southwest Orthopaedic Group, Houston Texas

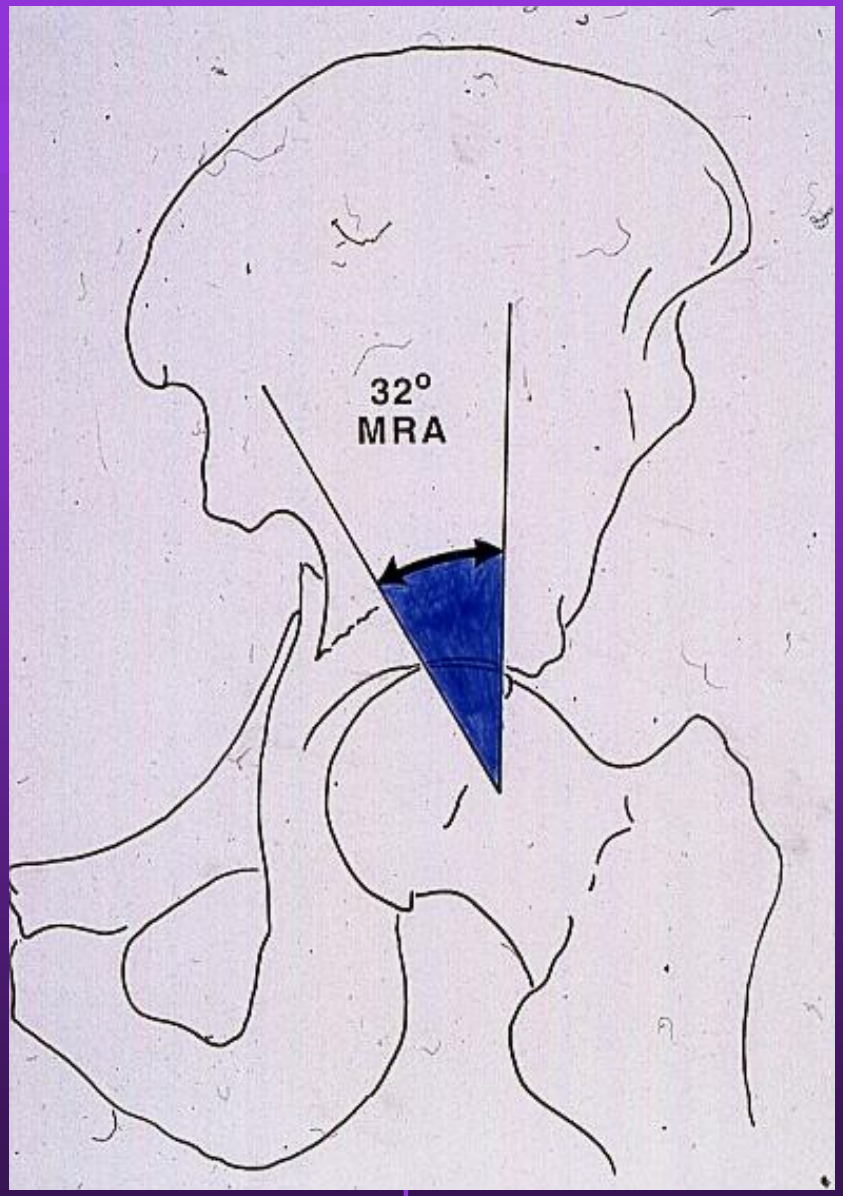
Indications For ORIF

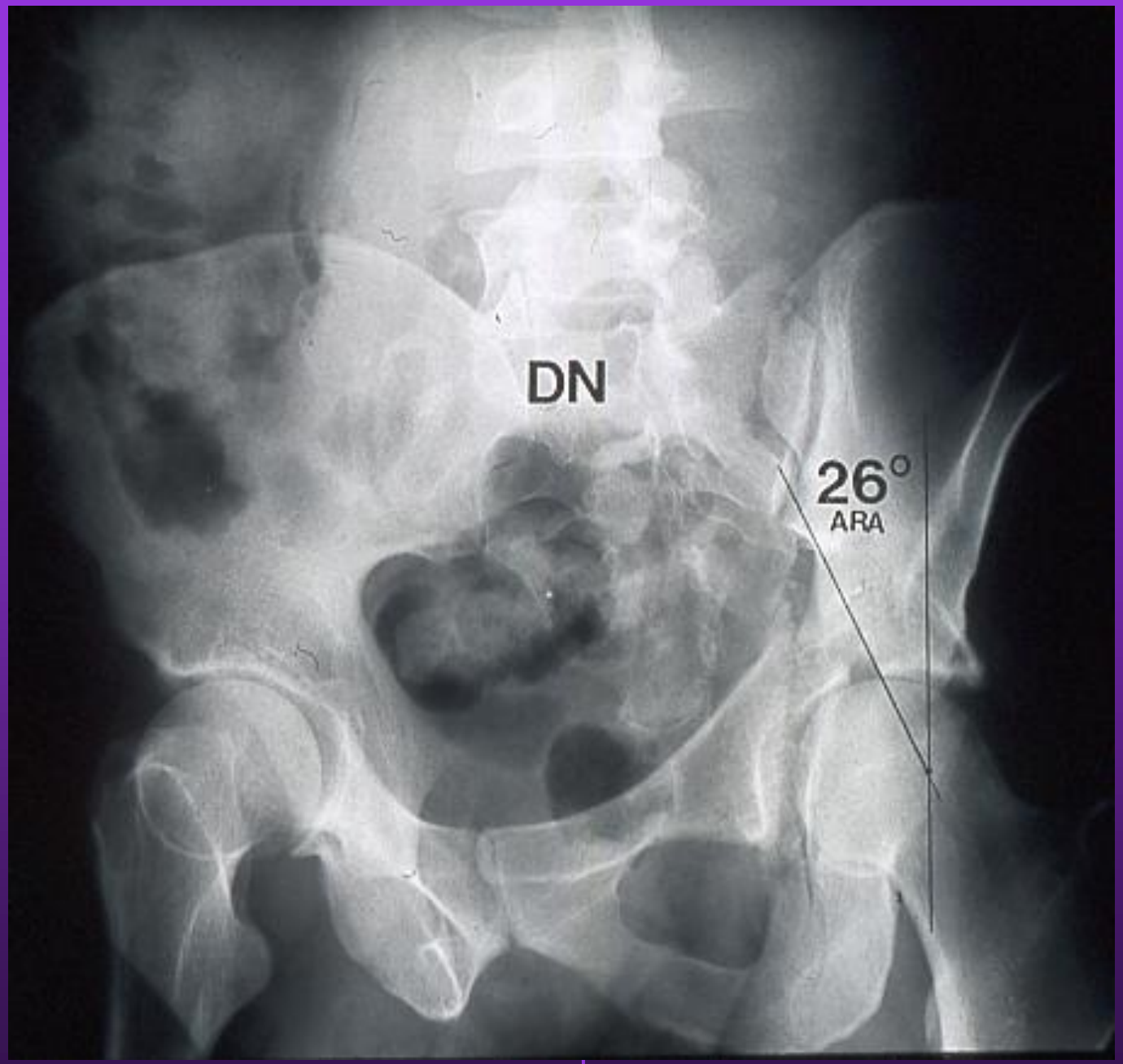
- Displaced dome > 1mm (ARA<25°, MRA<45°, PRA<70°), subluxation of femoral head
- Lack of 2º congruence (Both Column acetabular fractures only)
- 20-40% posterior wall

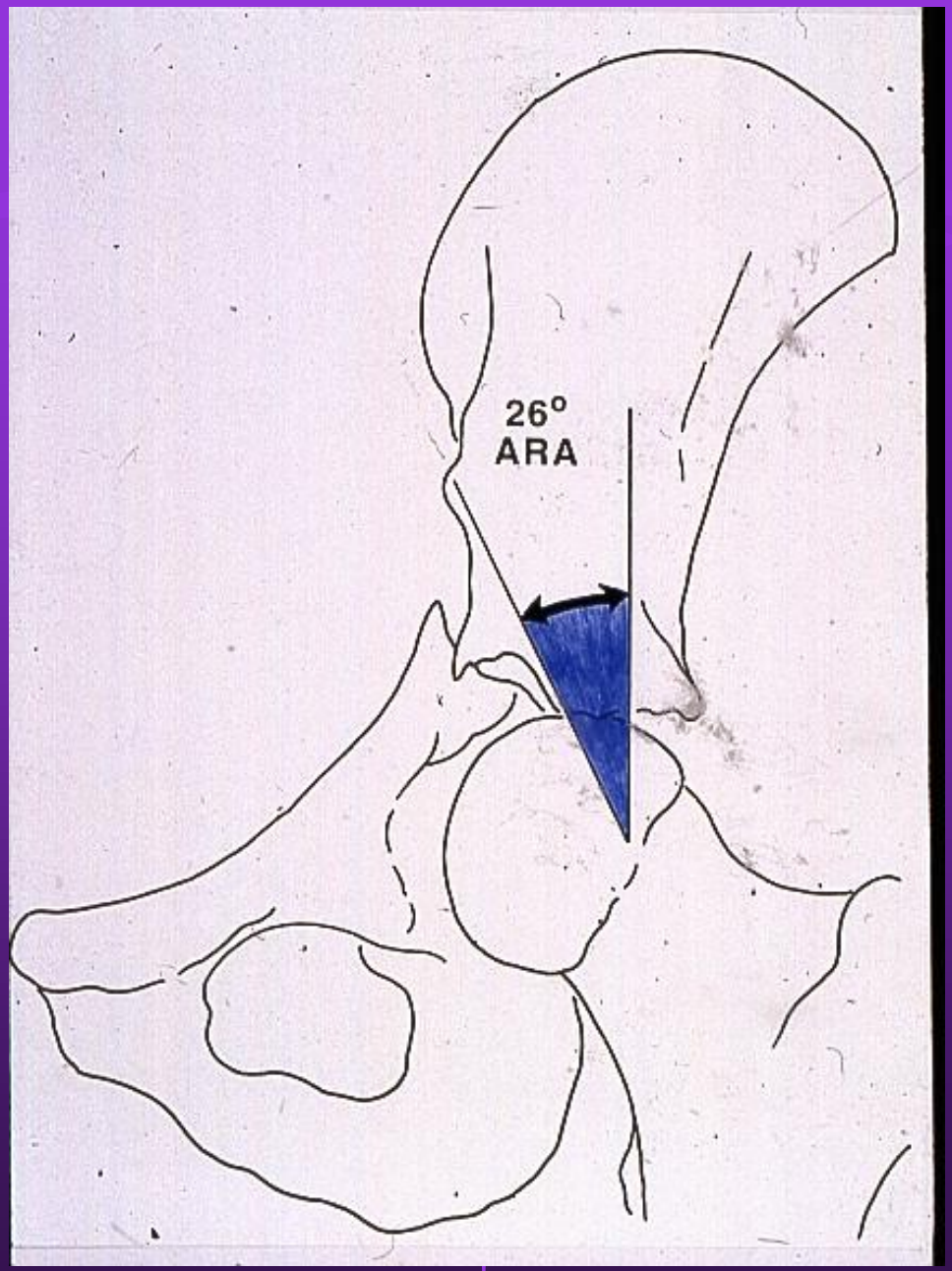

I
II
III
a

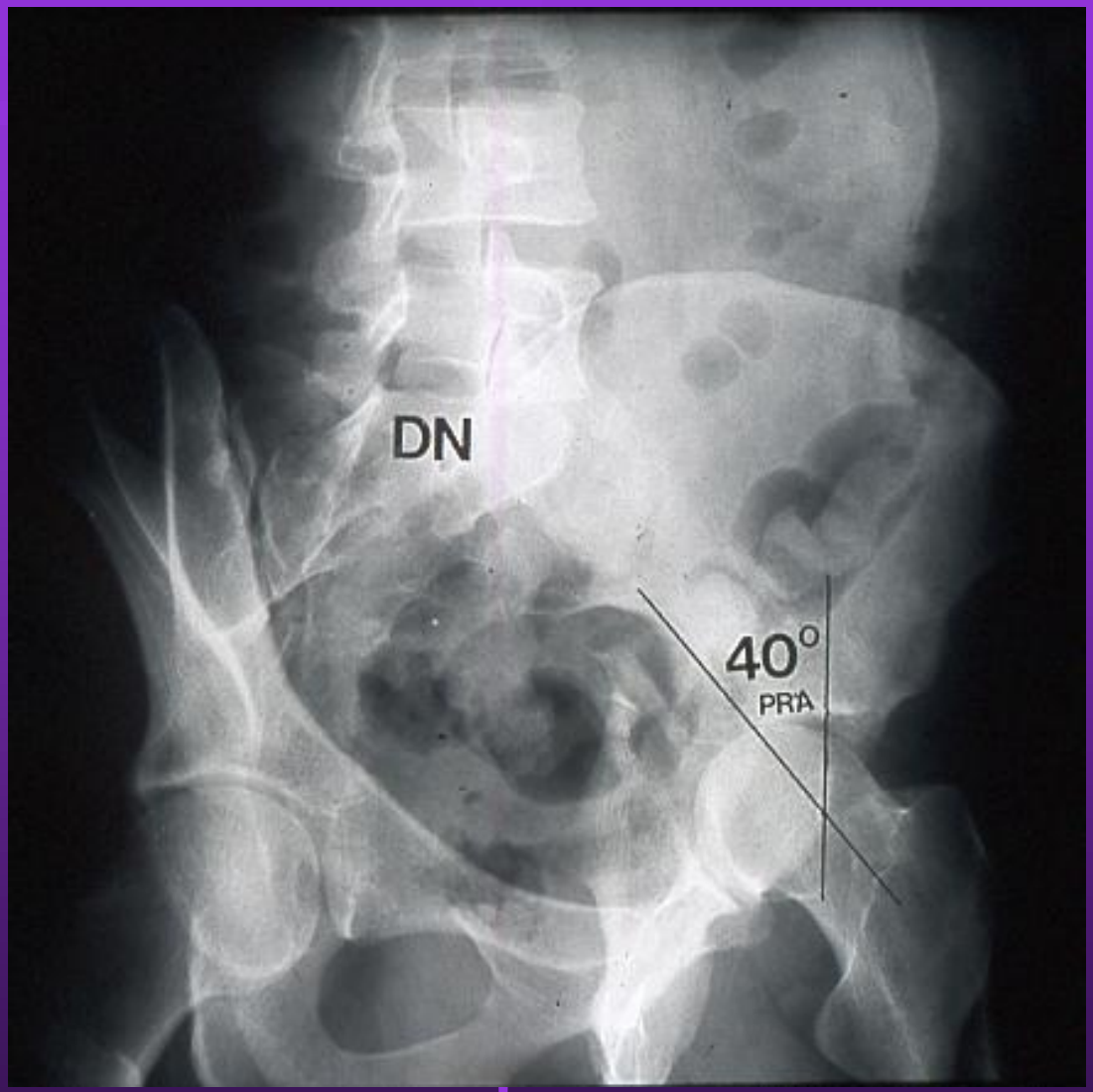

ANT.
MED.
POST.

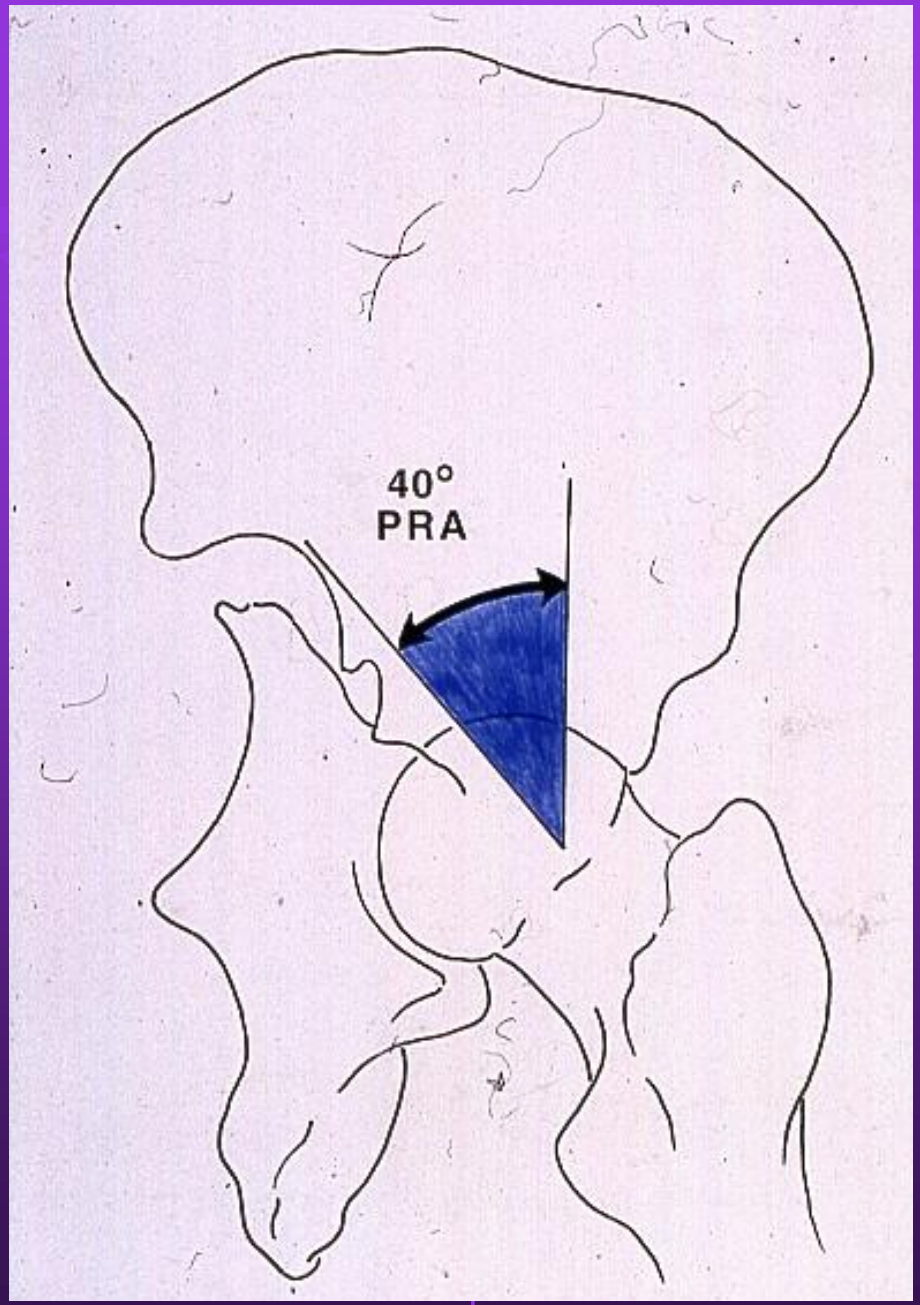

DN
32°
MRA


32°
MRA


DN
26°
ARA

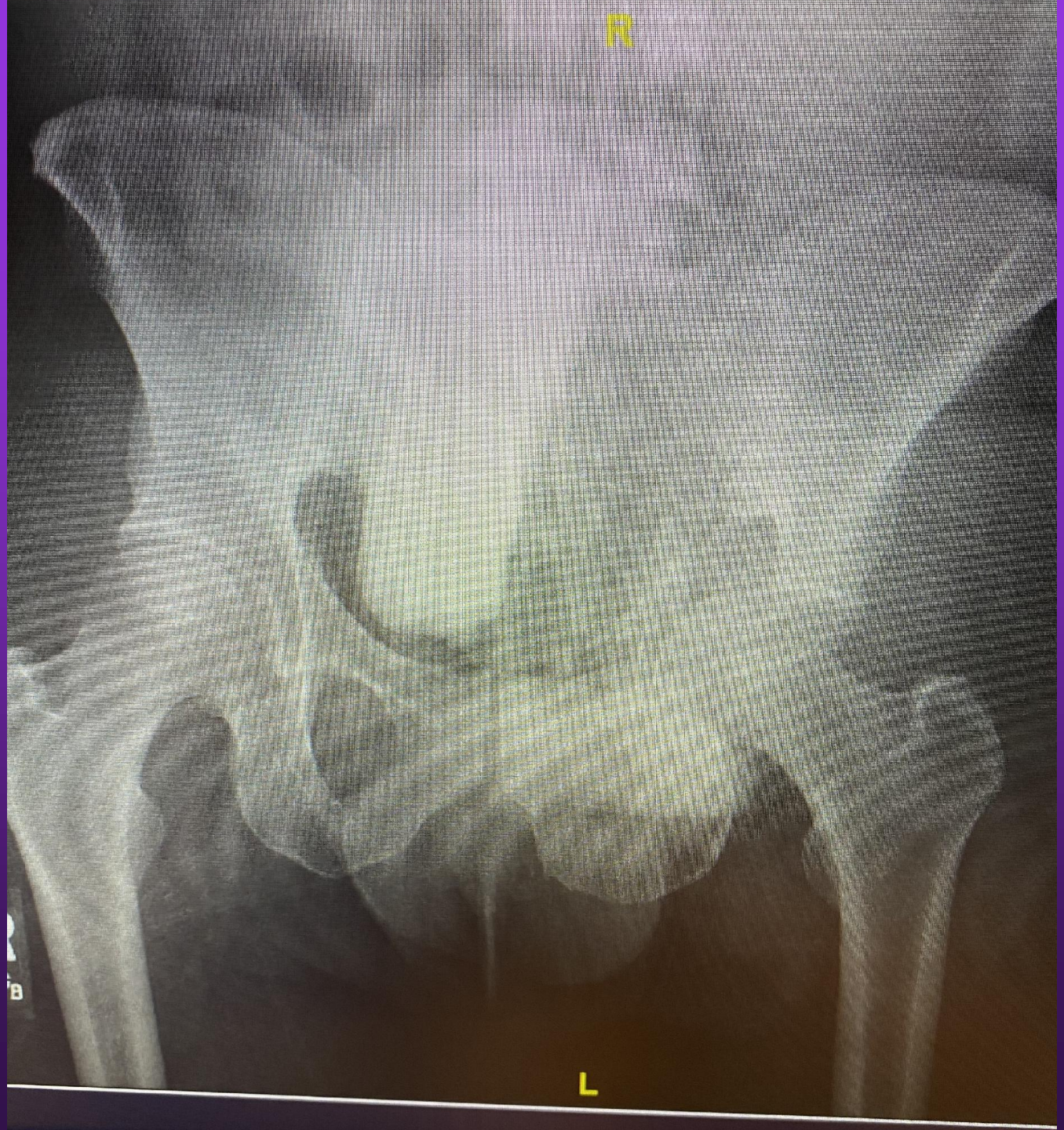

26°
ARA

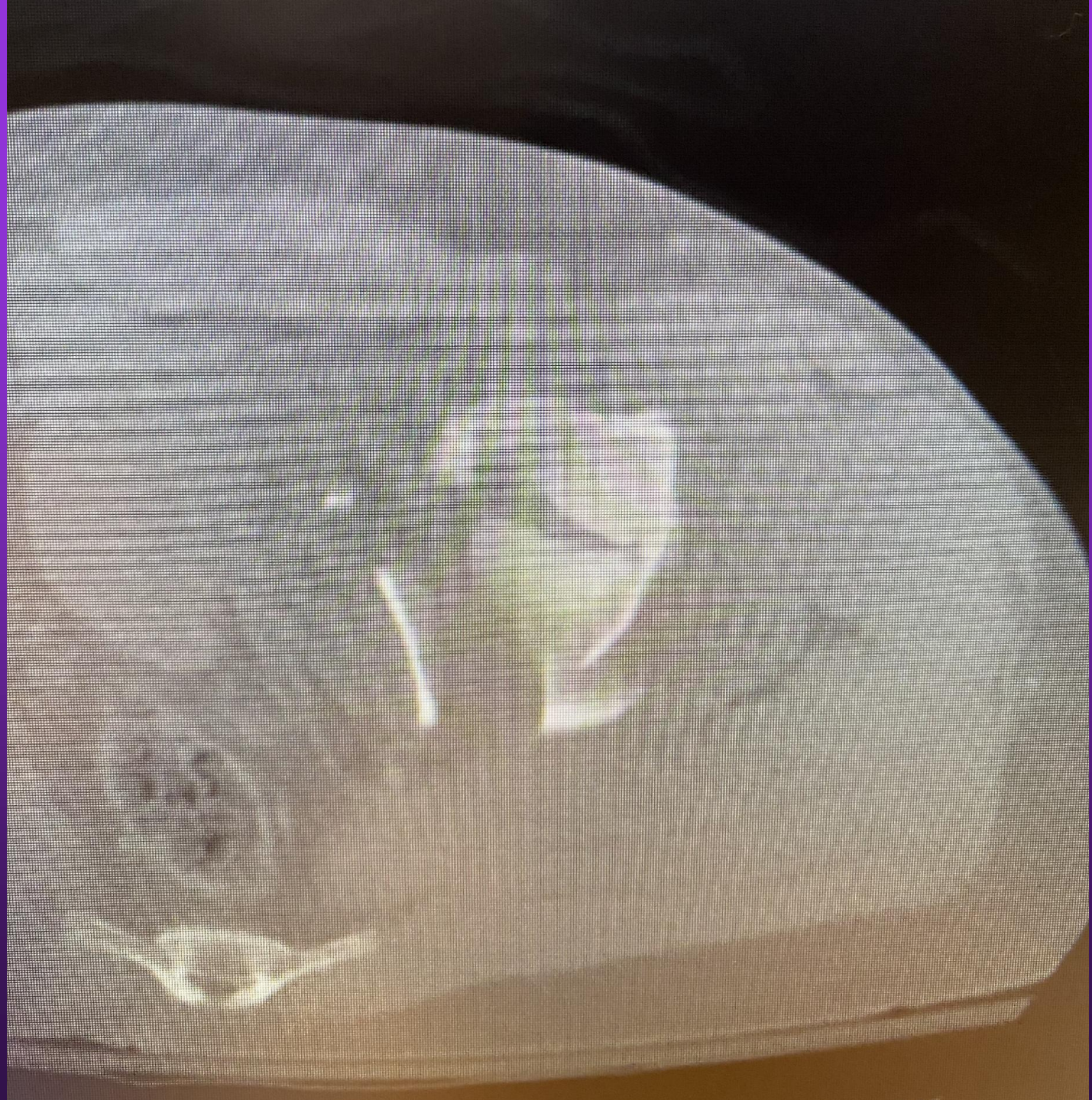

DN
40°
PRA

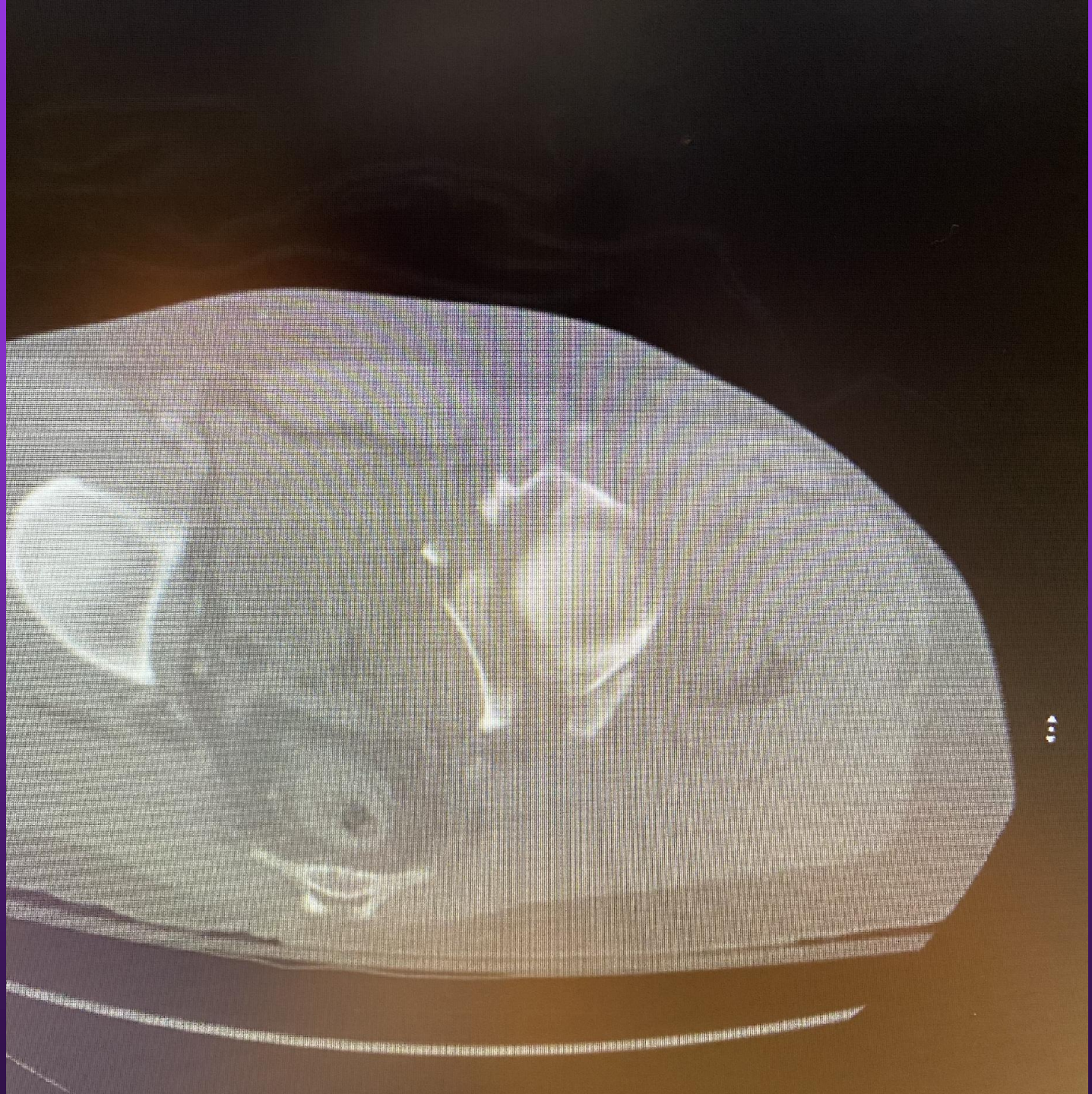

40°
PRA

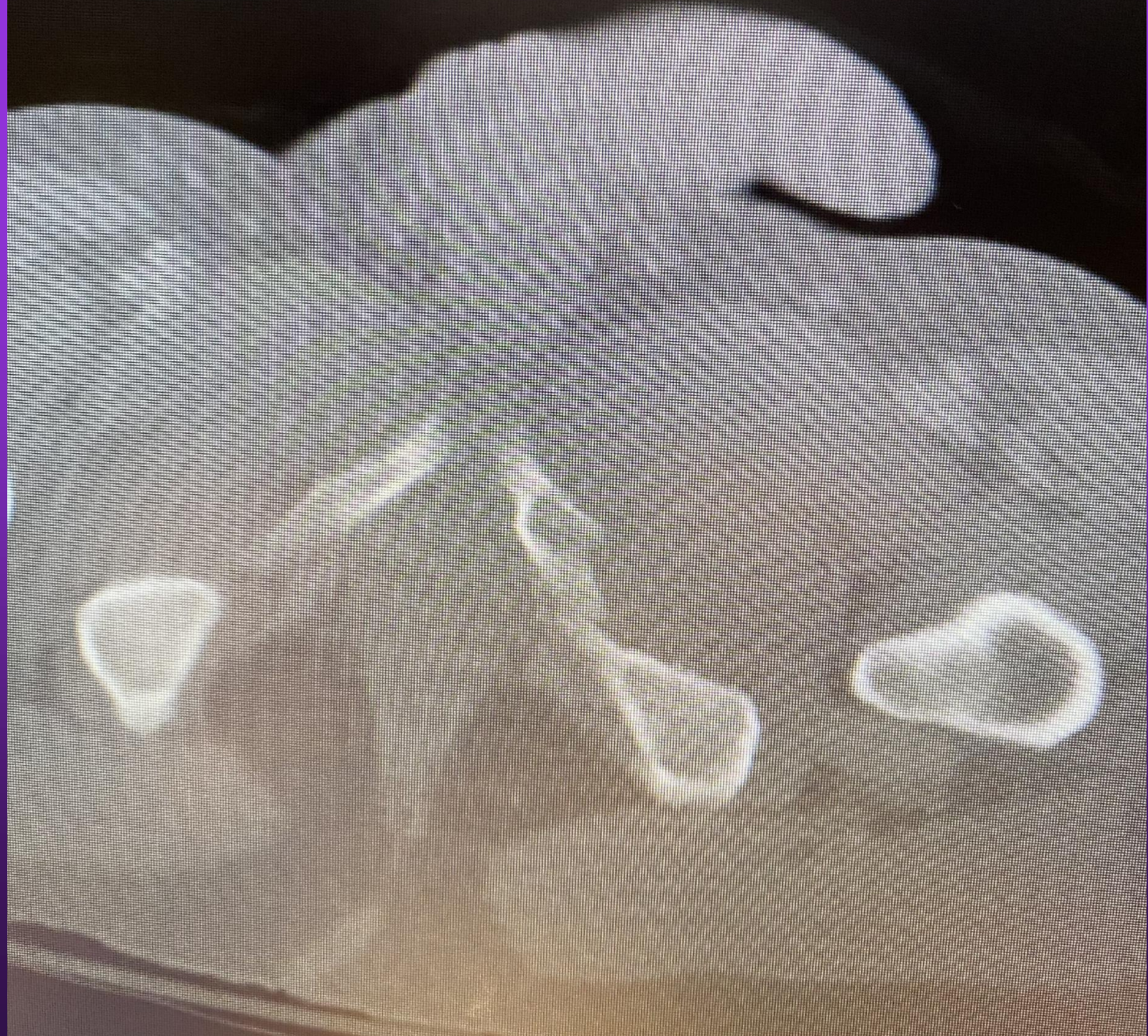
Timing of Surgery: Criteria

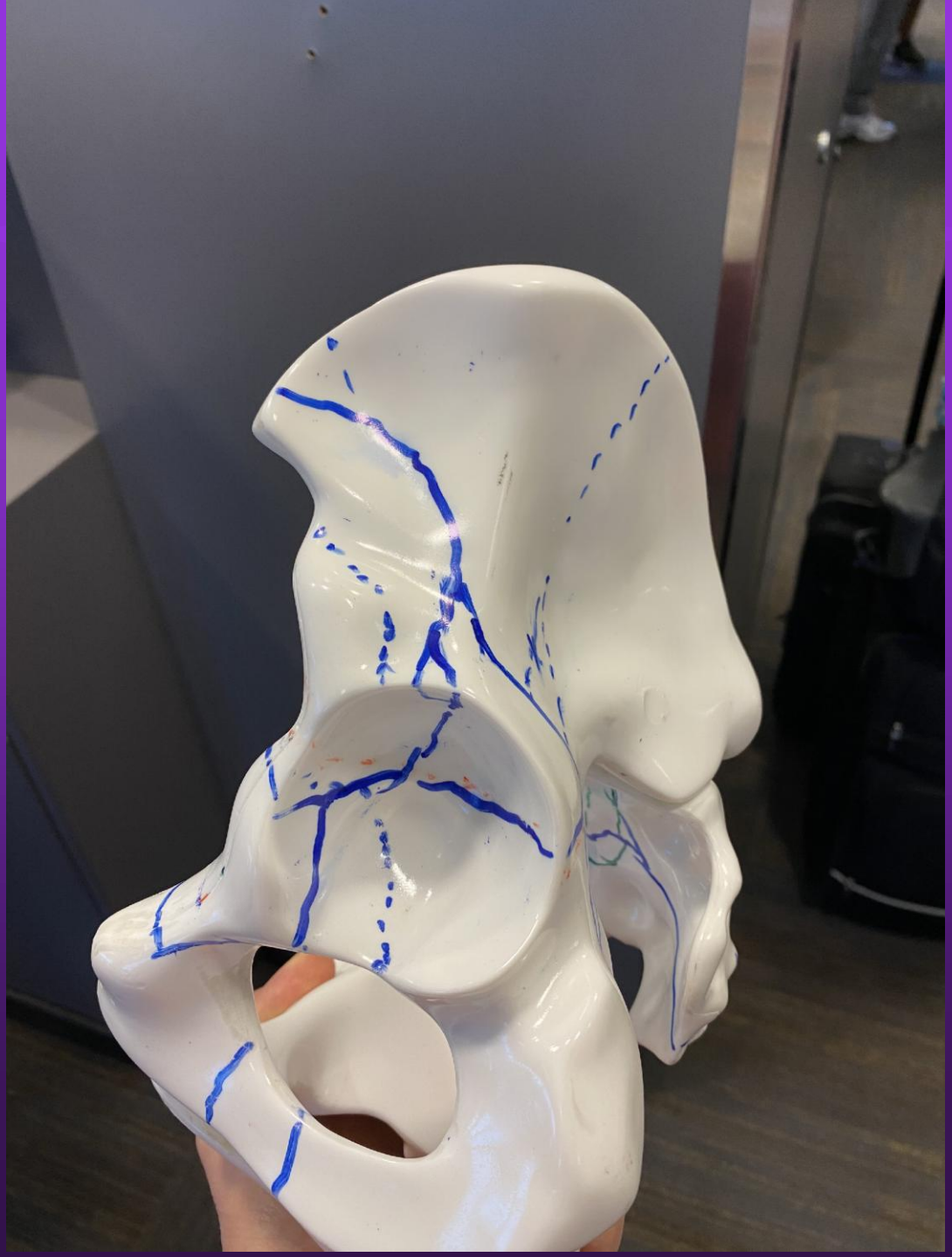
- Well - resuscitated patient
- Appropriate radiological work-up
- Appropriate understanding of fracture
- Appropriate operative team

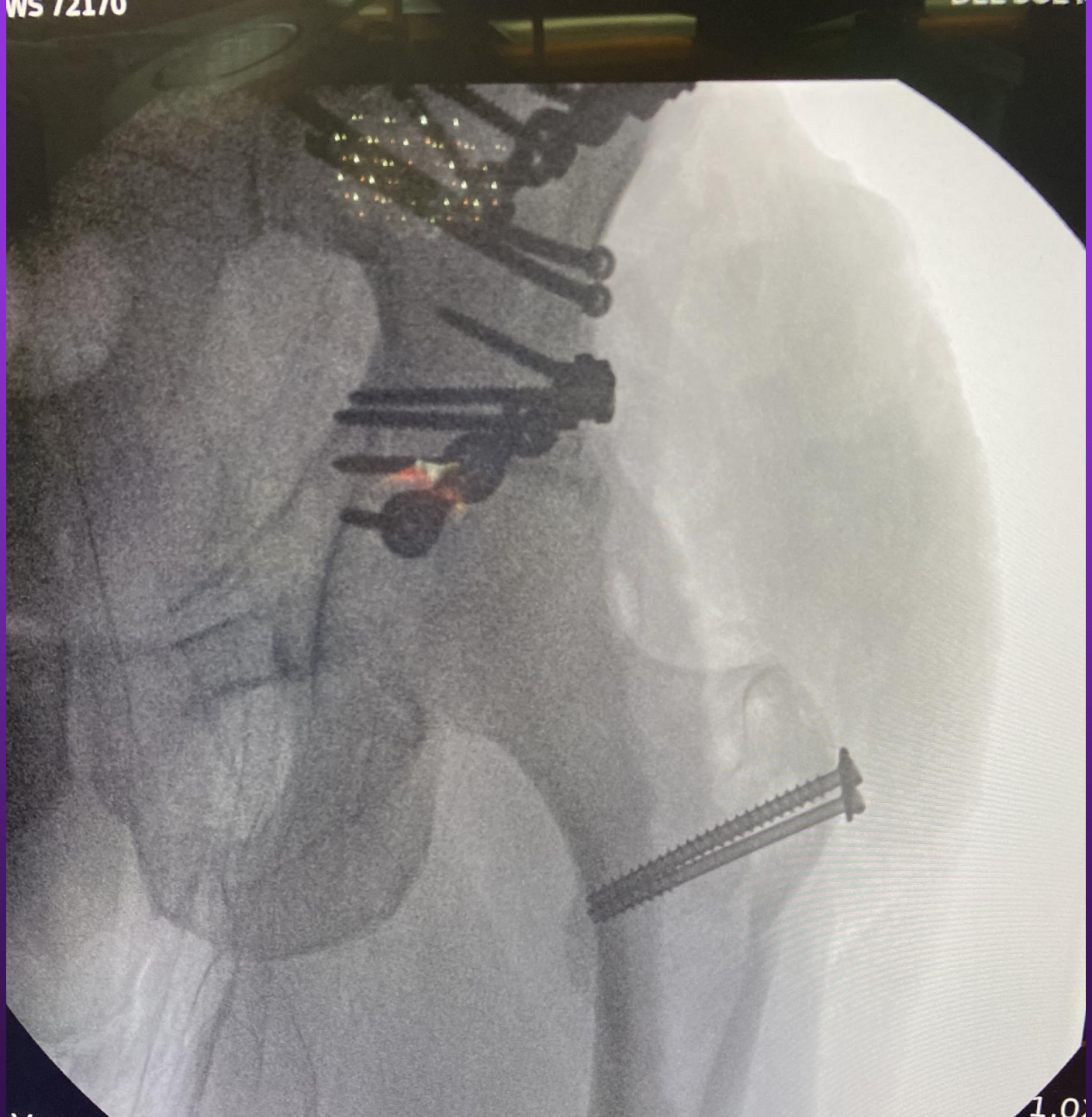

R
L

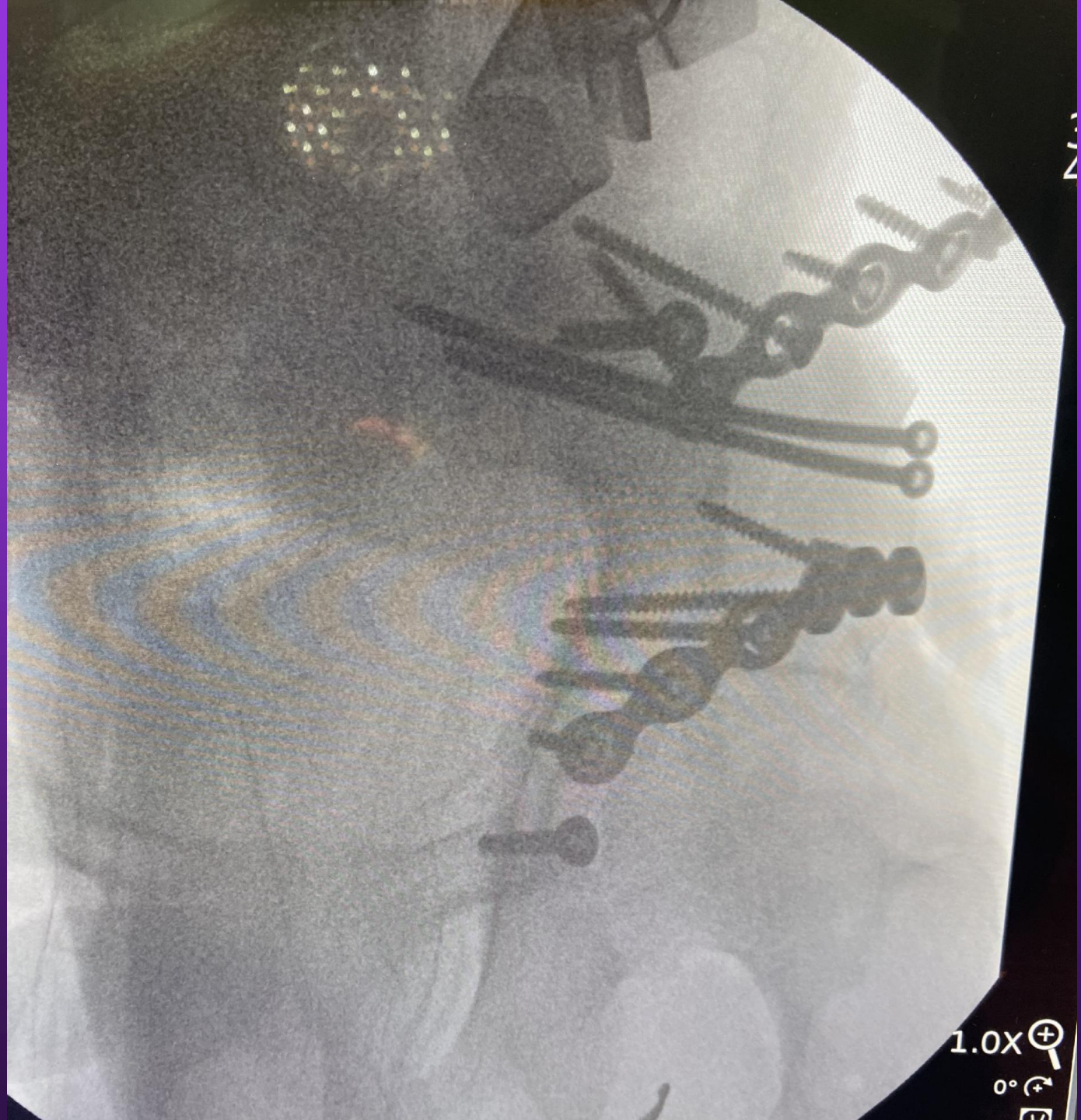


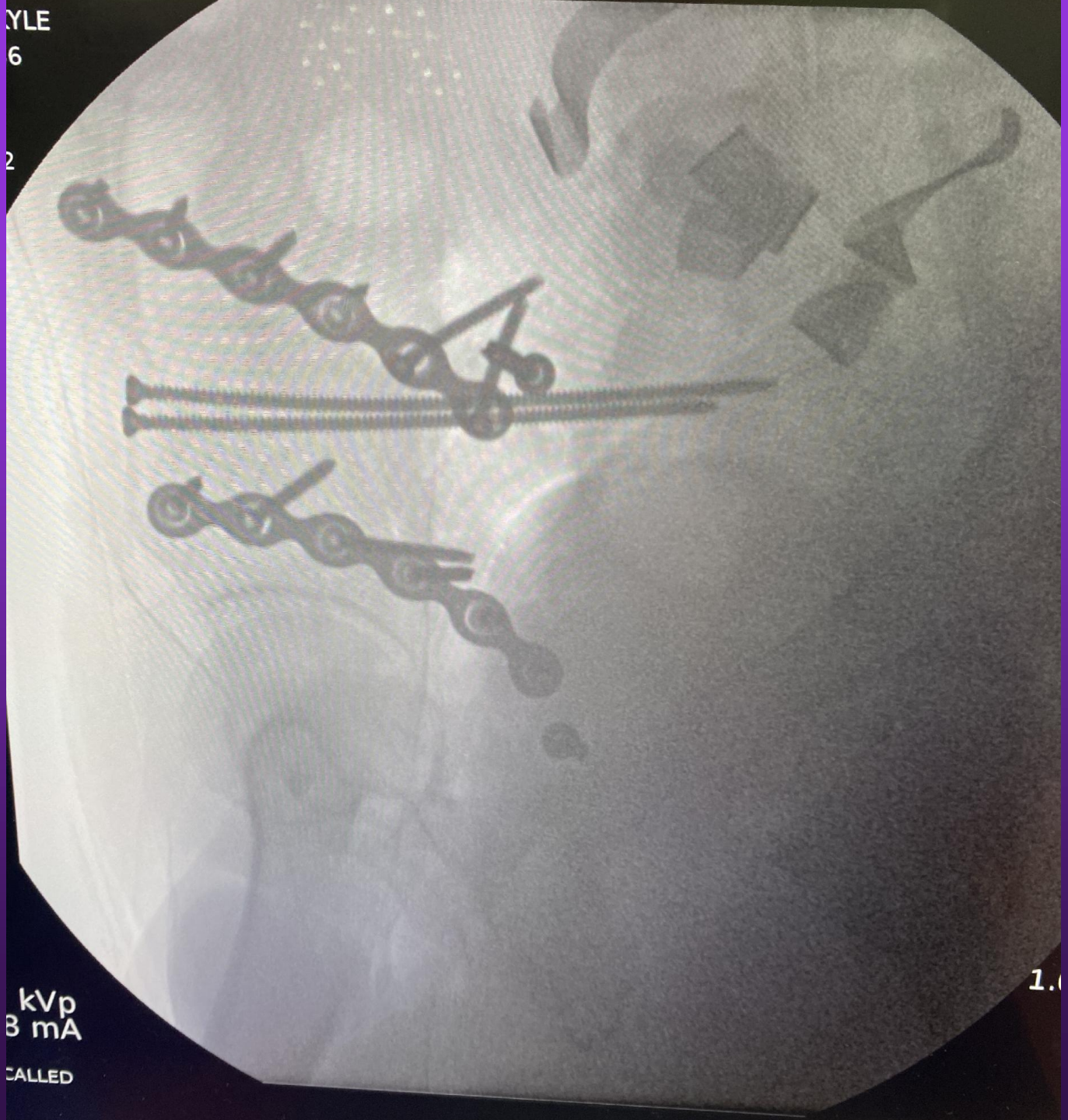


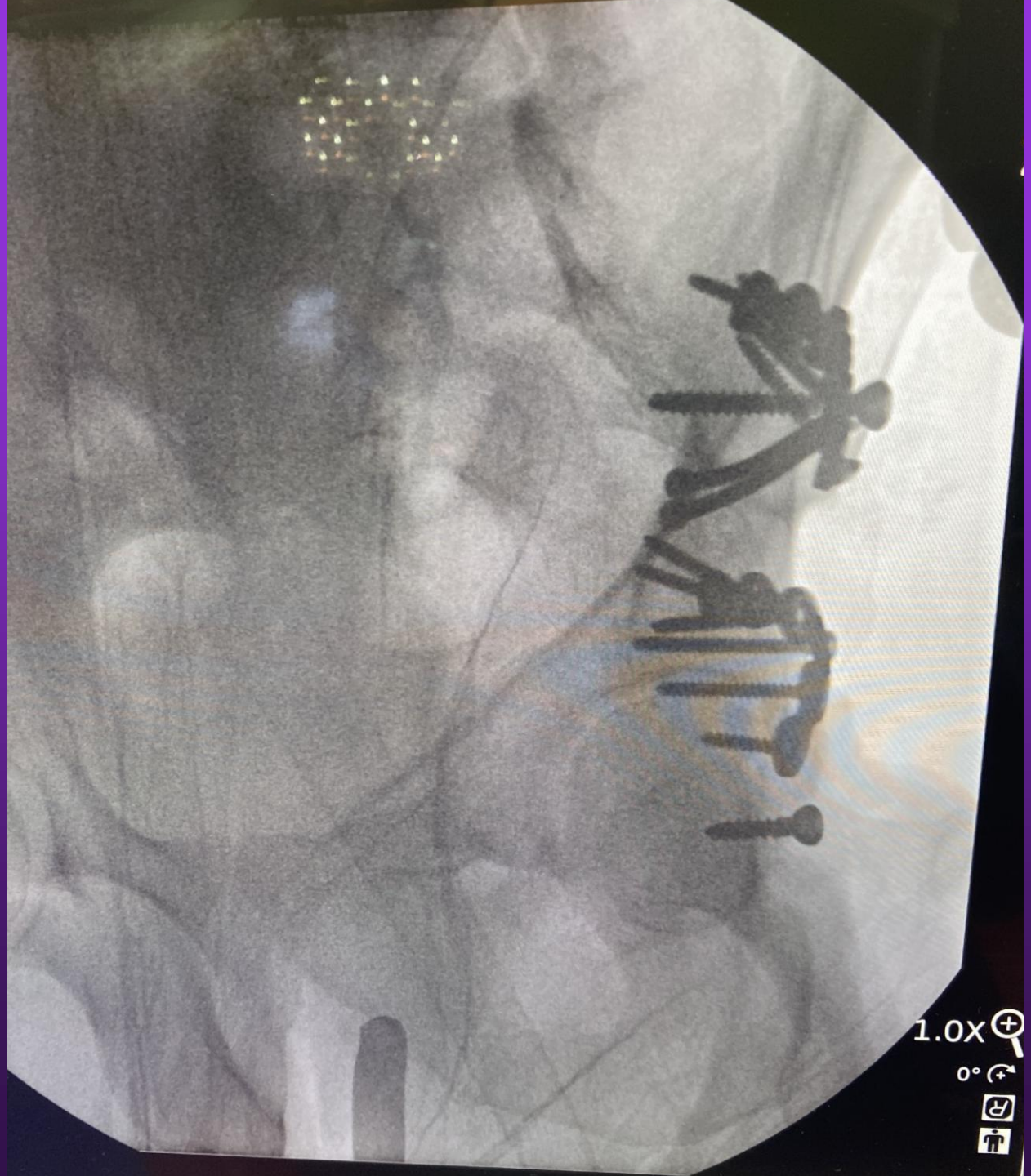






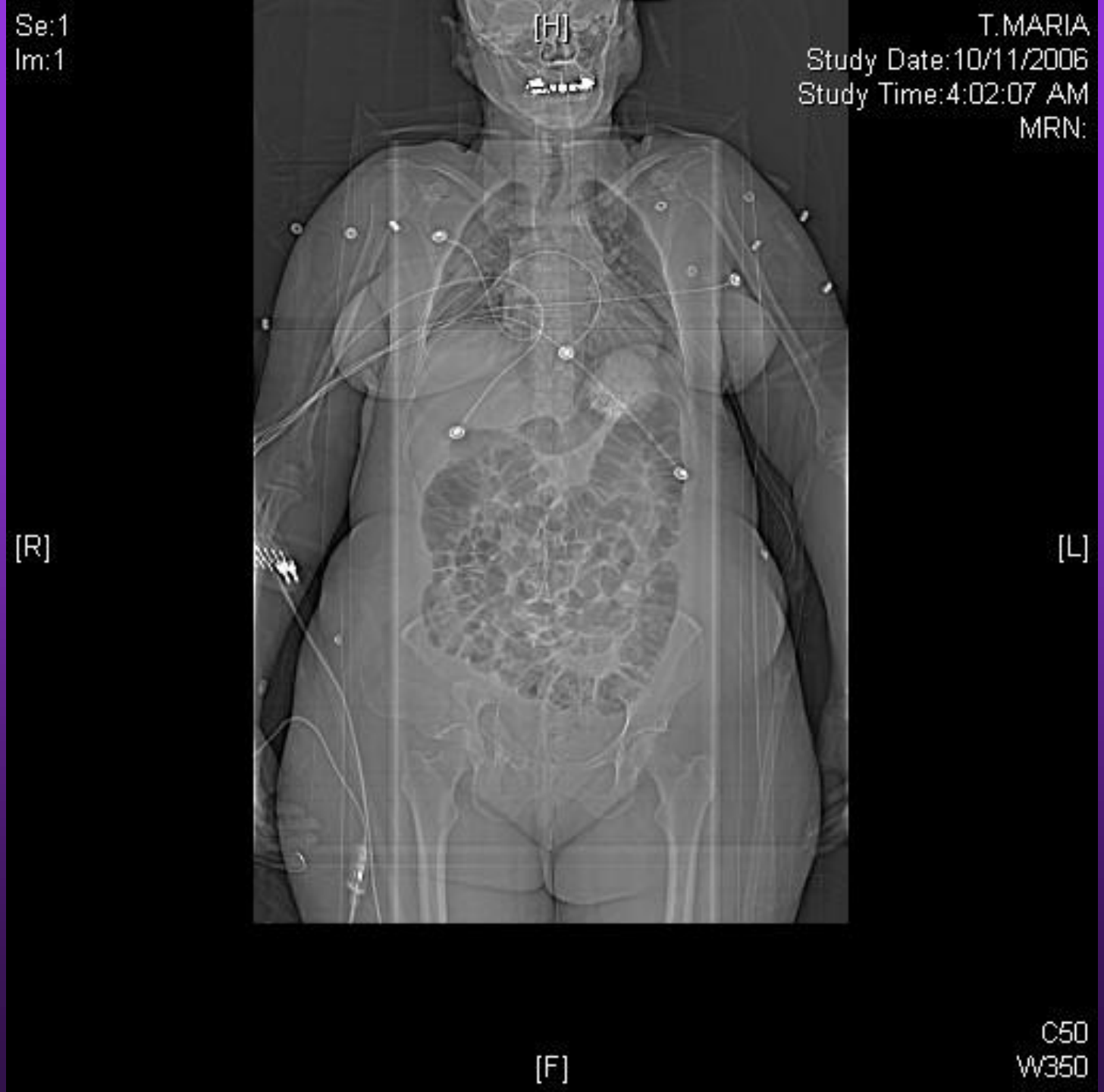

1.0x
0°

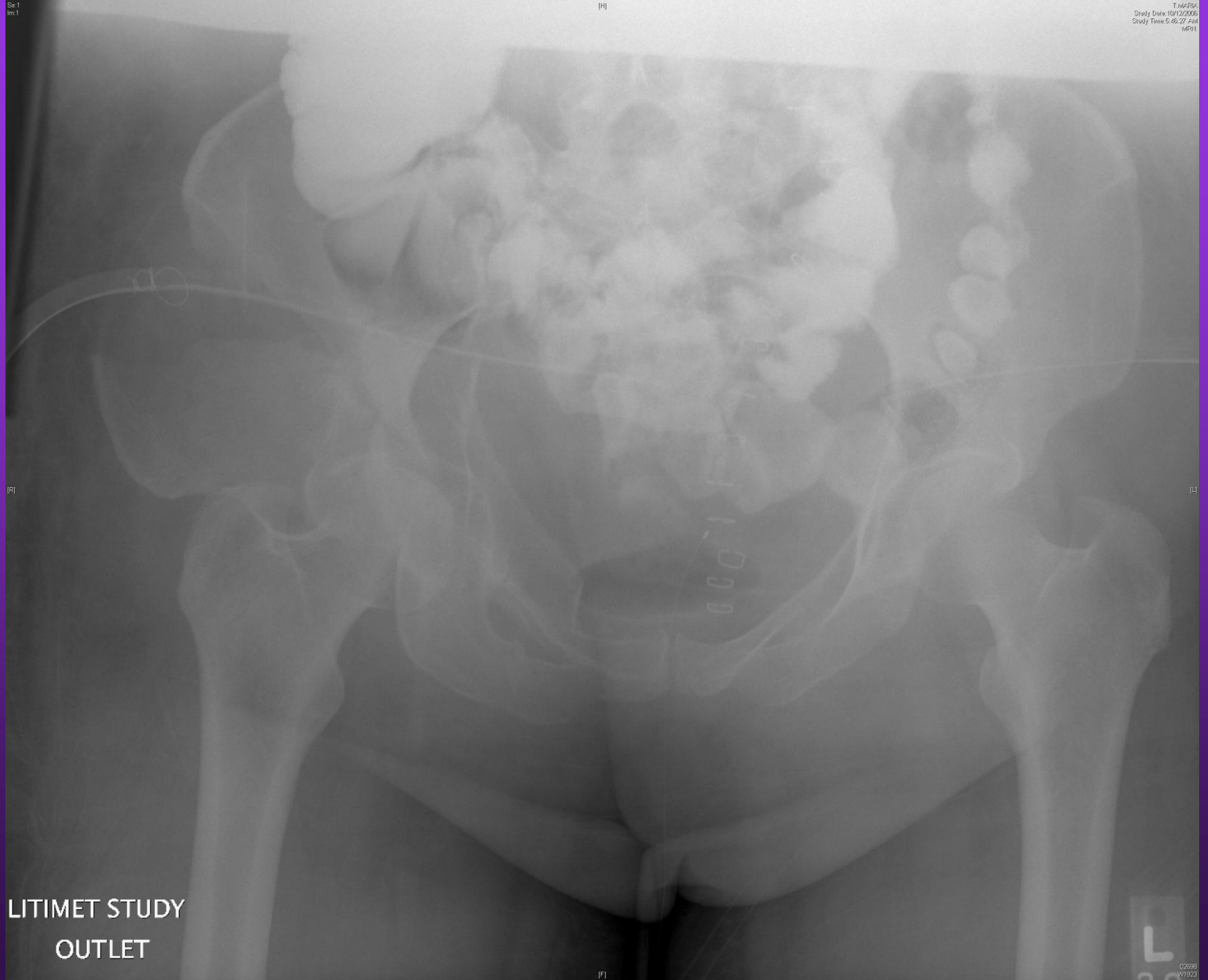

YLE
6
2
kVp
3 mA
CALLED

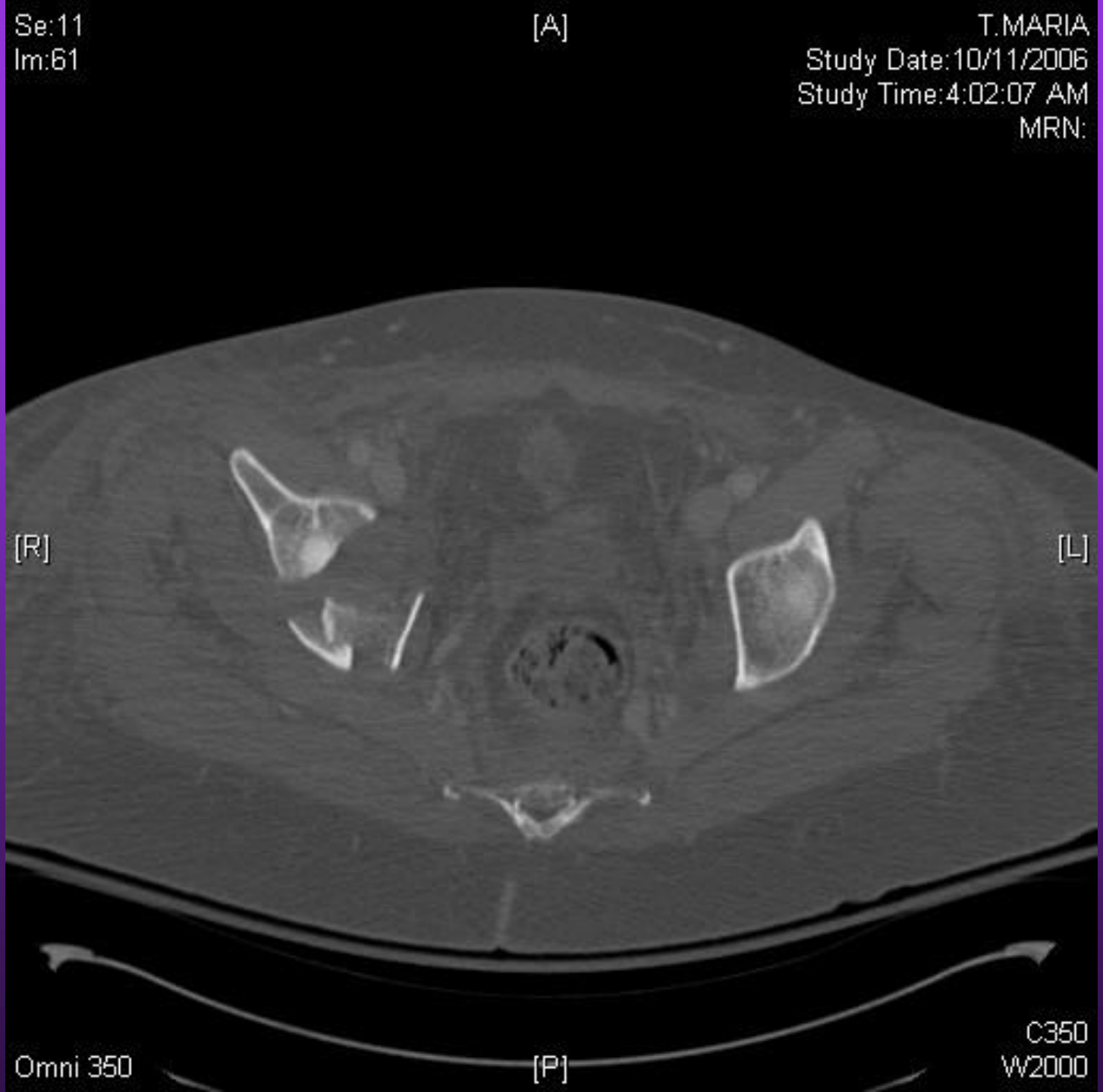

1.0x
0°
R

MT

- 52 yo car accident
- Obese, HTN, Diabetes, Fibromyalgia
- Crushed Foot
- Both column posterior wall acetabular fracture
- Options?

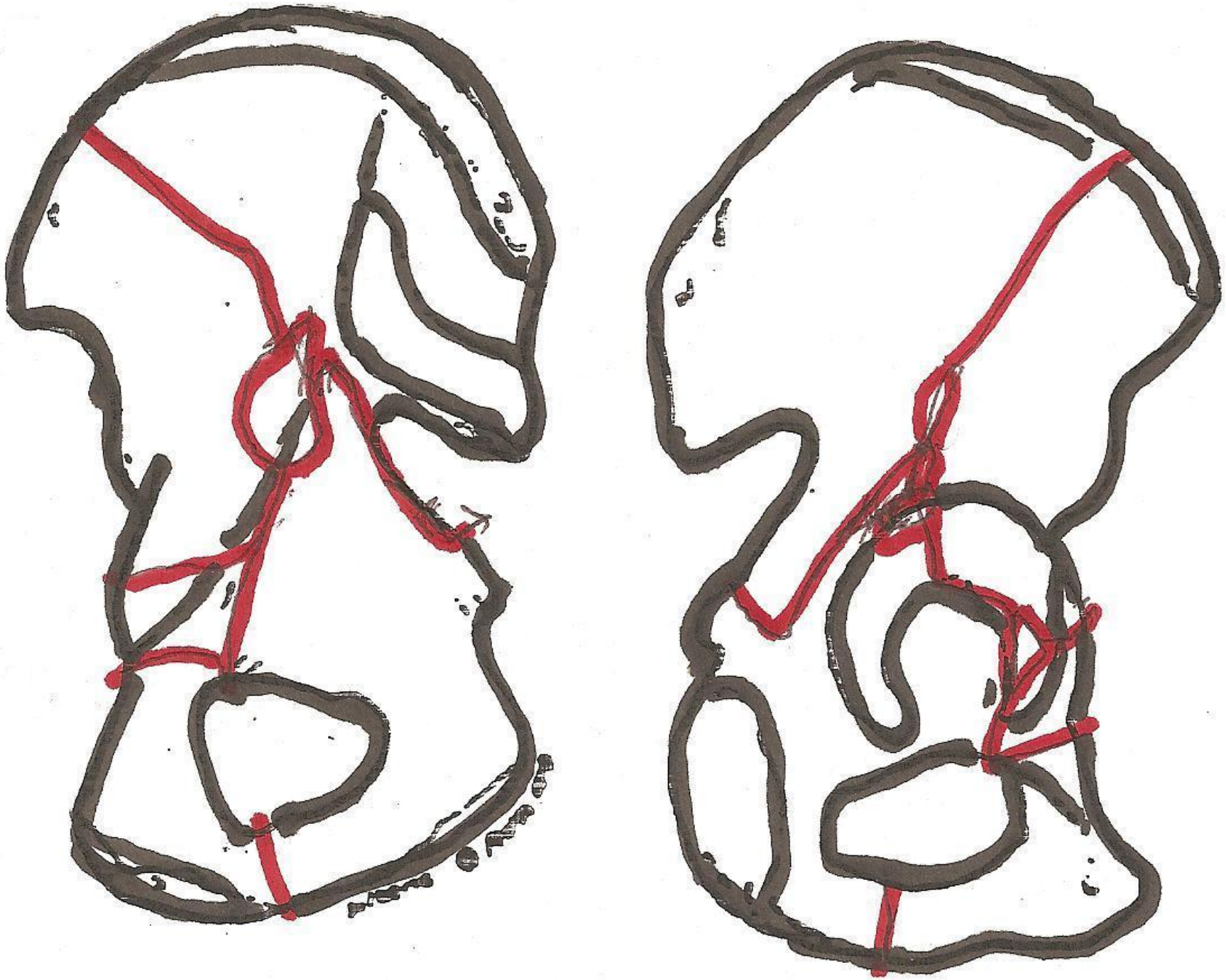

Se:1
Im:1
[H]
T.MARIA
Study Date:10/11/2006
Study Time:4:02:07 AM
MRN:
[R]
[L]
[F]
C50
W350

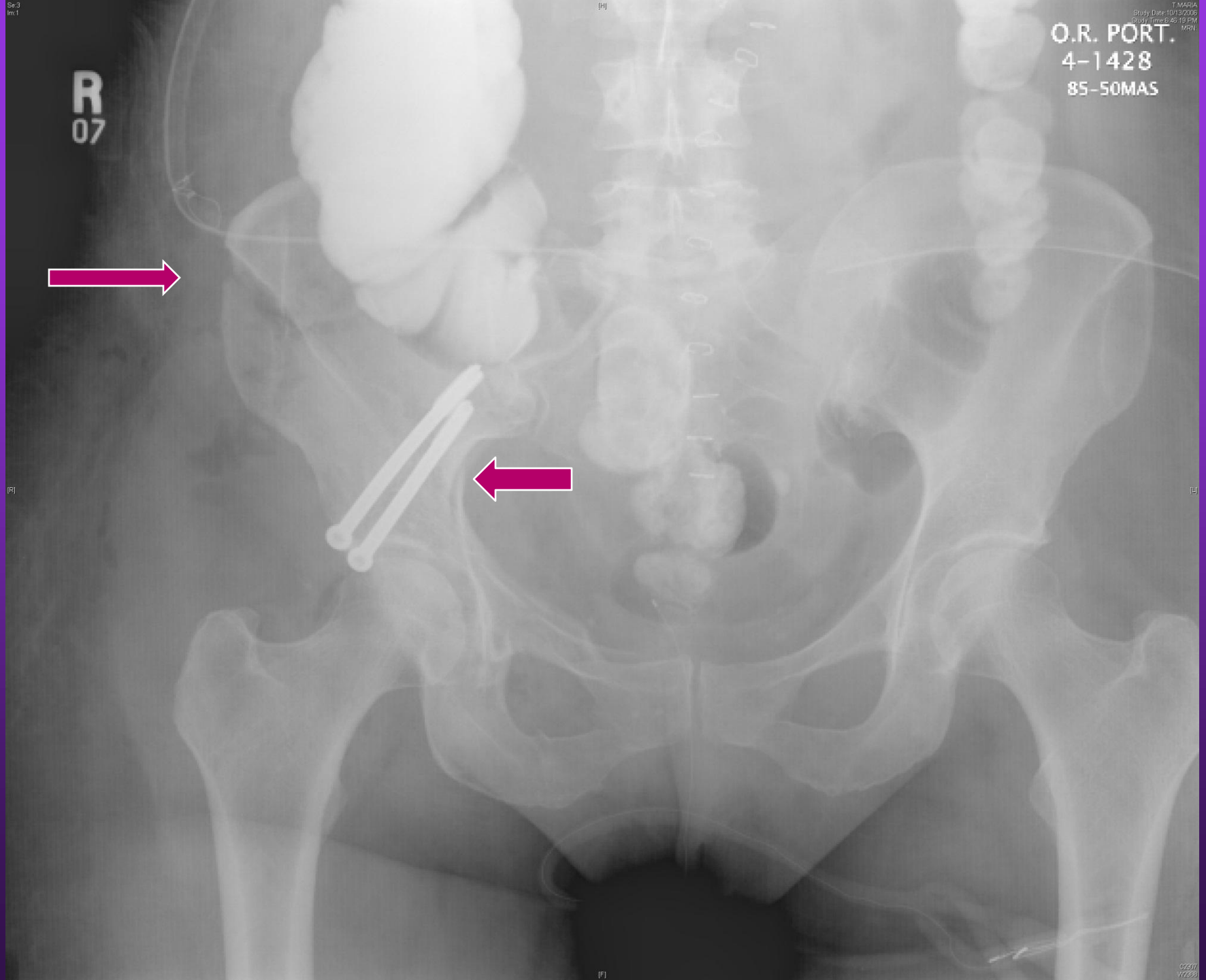

LITIMET STUDY
OUTLET


Se:11
Im:61
[A]
T.MARIA
Study Date:10/11/2006
Study Time:4:02:07 AM
MRN:
[R]
[L]
Omni 350
[P]
C350
W2000

Surgeon

- 4 years medical school, 5 year orthopaedic residency, and 1 year trauma fellowship all at Southwestern in Dallas
- Proclaimed that he wanted to do all pelvis and acetabular fractures at the hospital




R
07
O.R. PORT.
4-1428
85-50MAS

Contraindications

- Lack of know how (better is not good enough – needs to be perfect)
- Comorbidities (CV, non ambulators, etc)
- Non compliant (alzheimers, Schizo)
- Severe osteoporosis

Experience

- is not doing a better job on cases but doing a perfect job more efficiently

Dislocated Hip

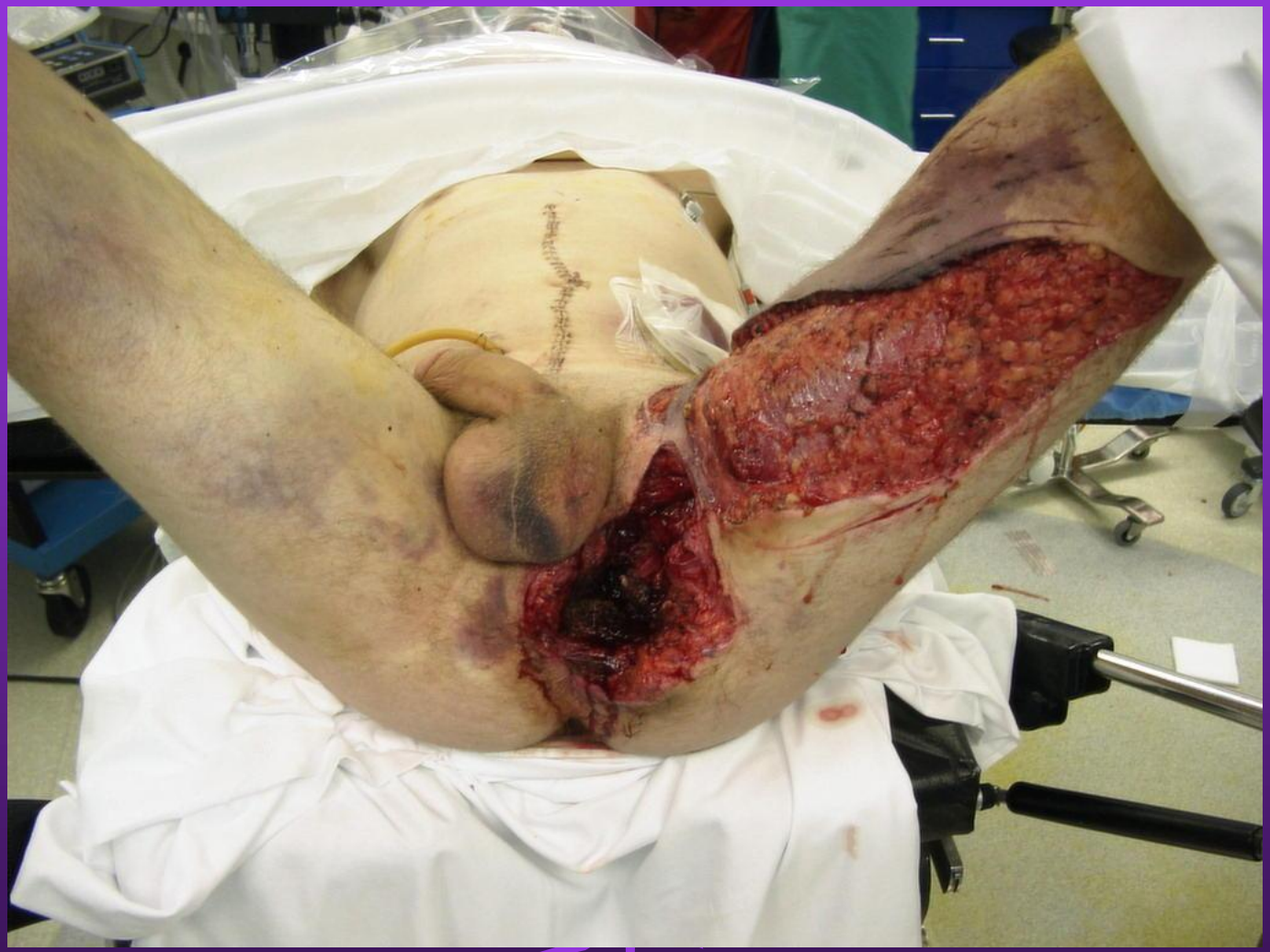
- Emergent reduction (6-12 hrs) general anesthesia preferred
- Central subluxation with Tr, BC, T-type or ACPHT-Distal femur skeletal traction

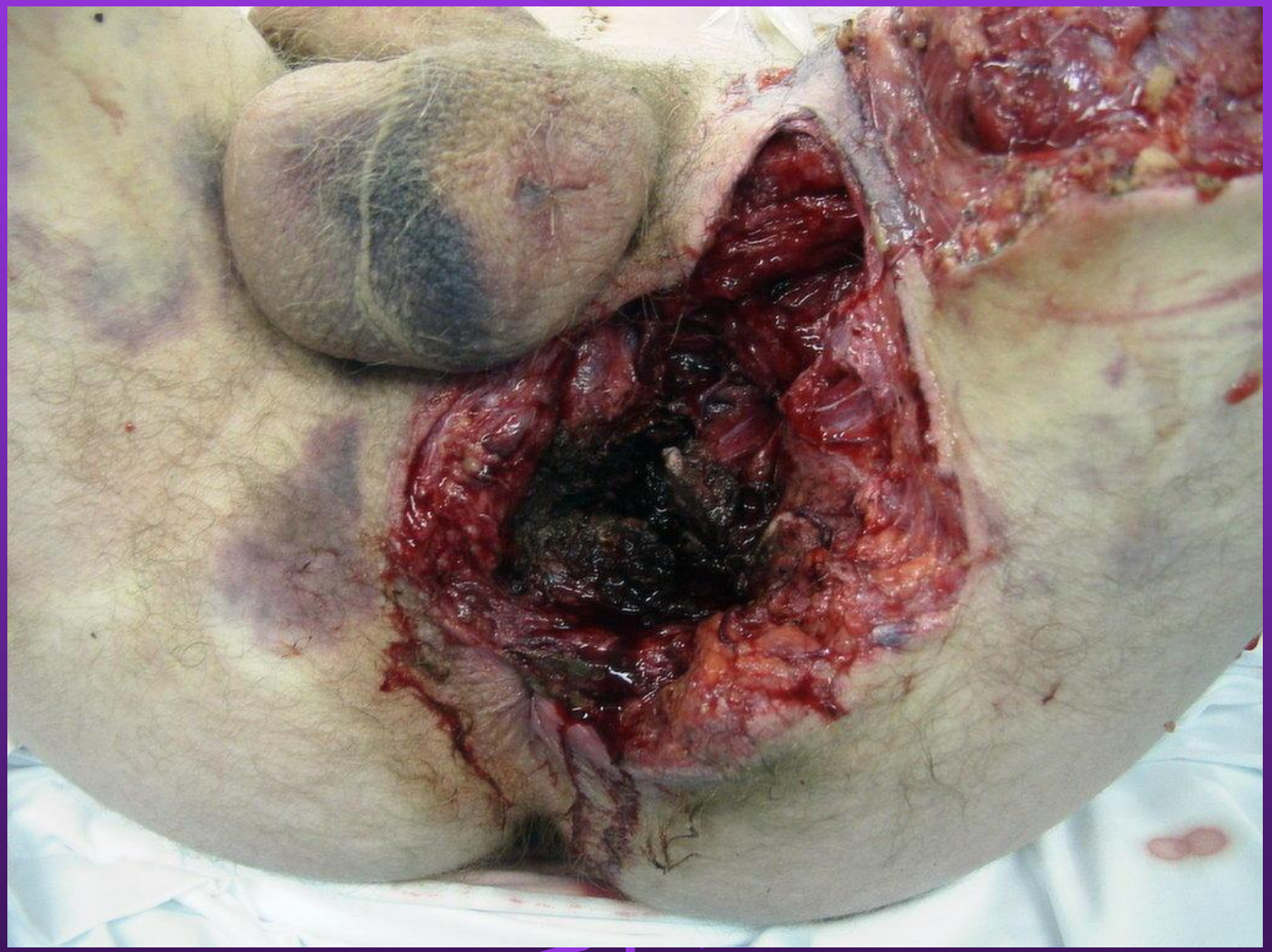
Emergency cont.

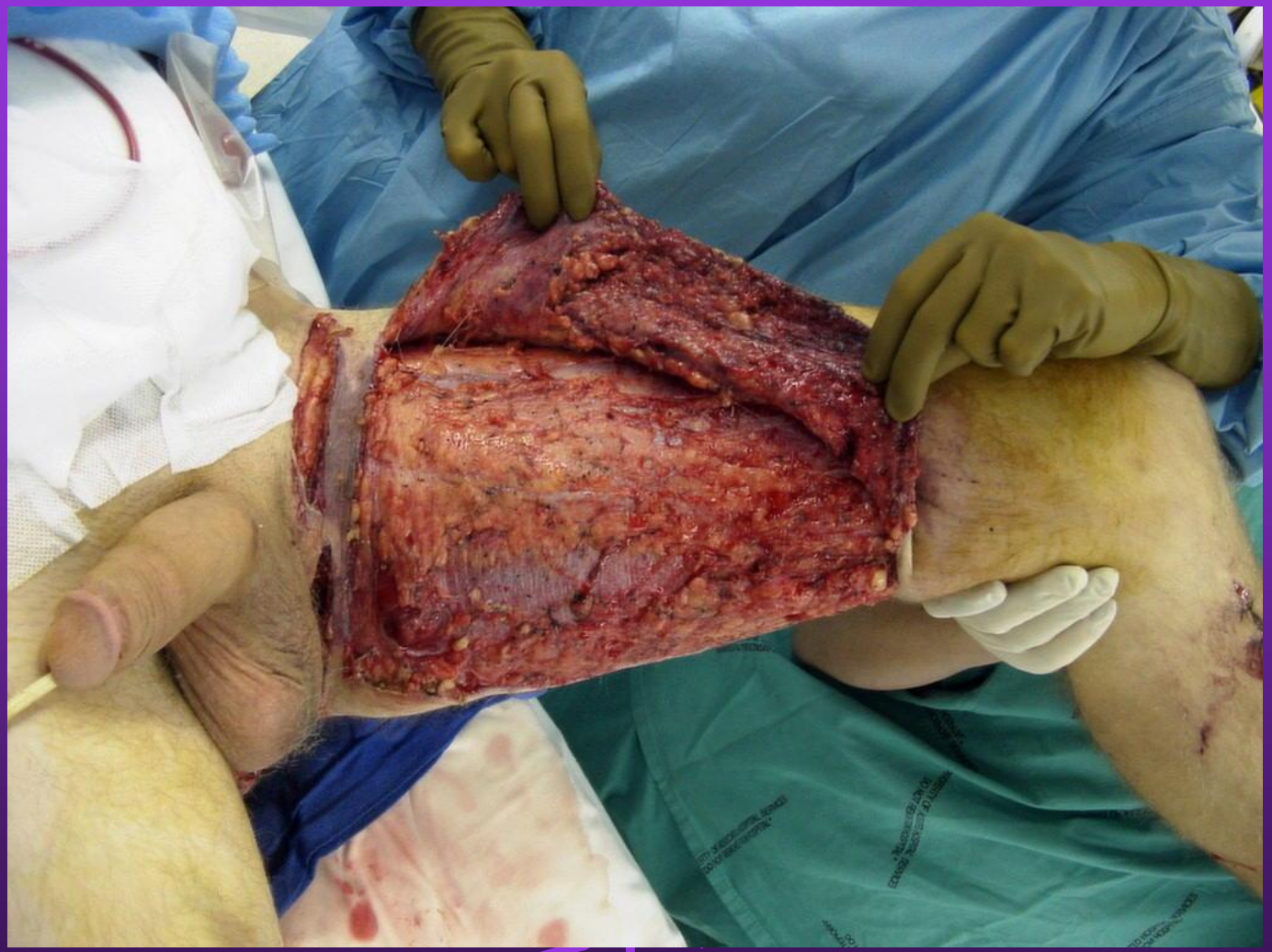
- Intrarticular fragments
- Associated femoral neck fracture

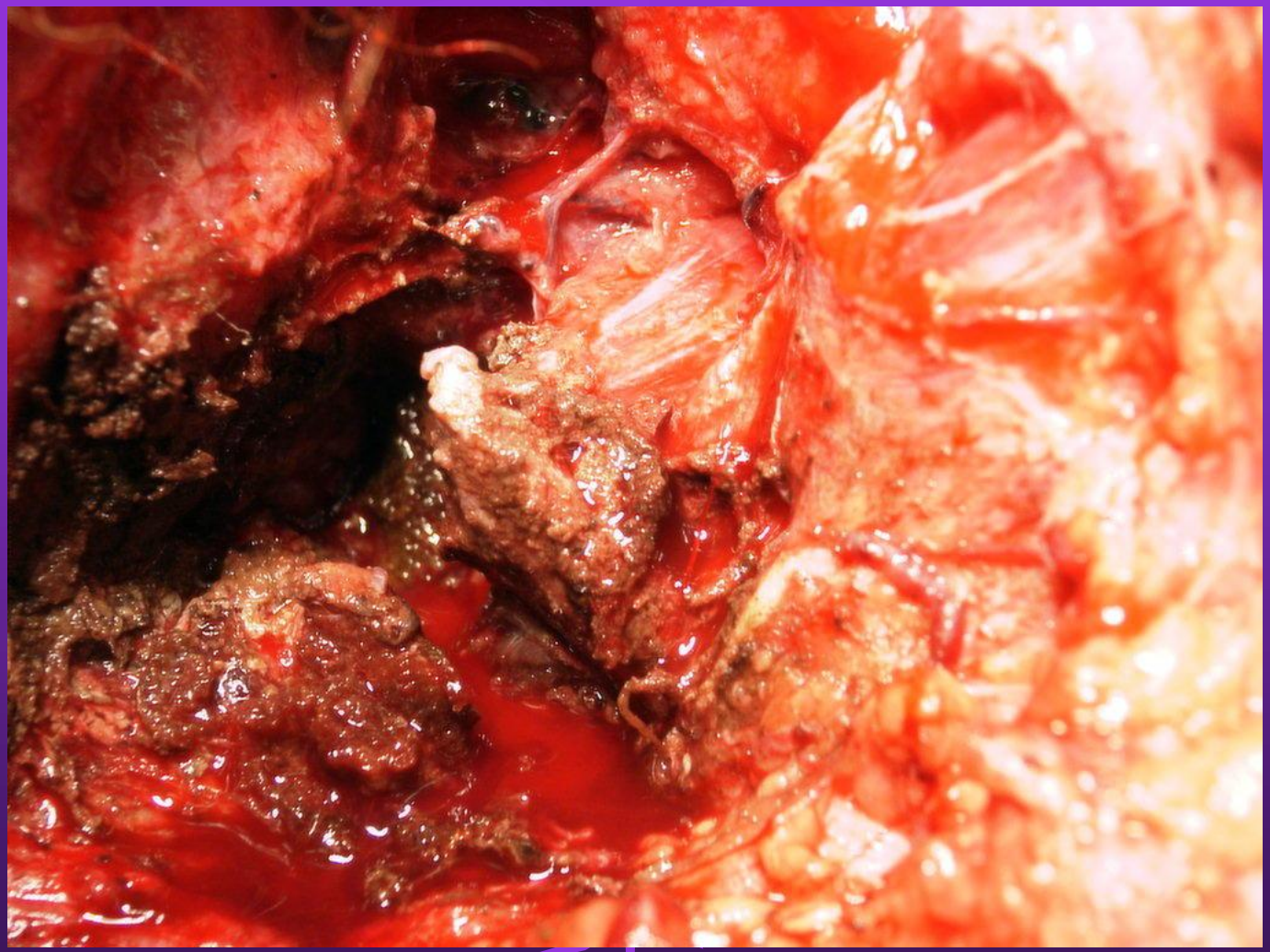
Surgical Emergencies

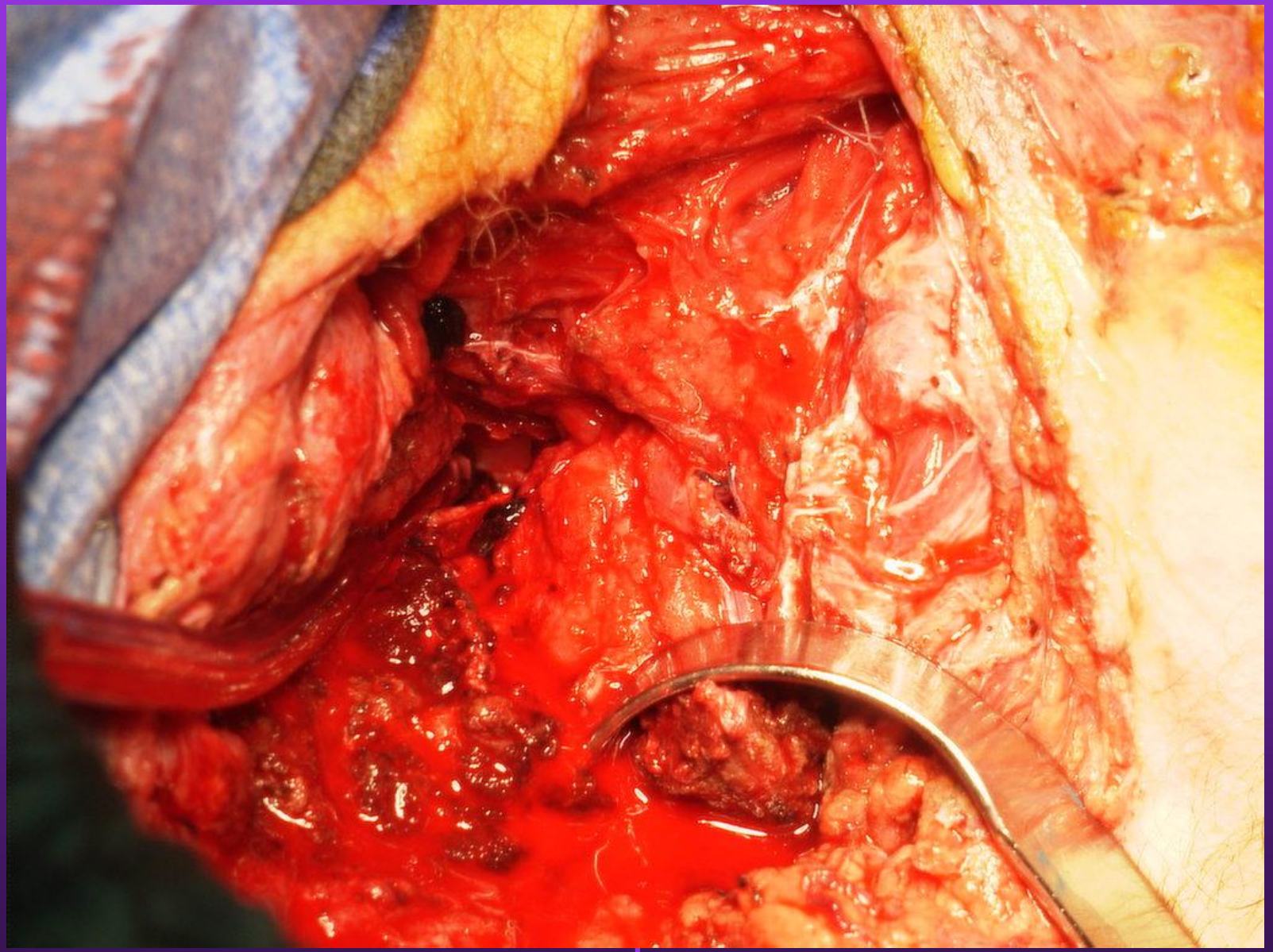
- Open fractures
- Hip dislocation
- Progressing sciatic nerve palsy

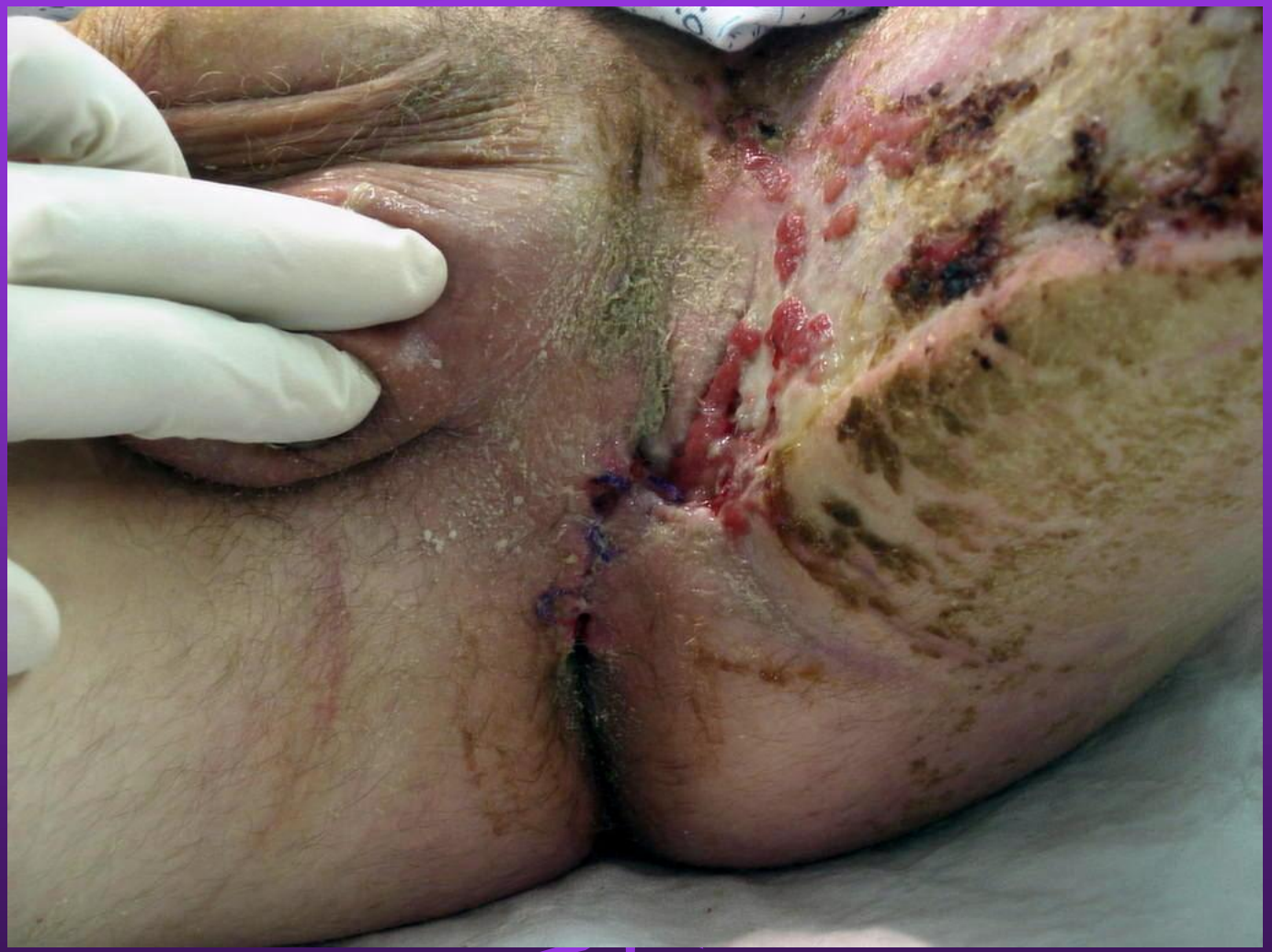


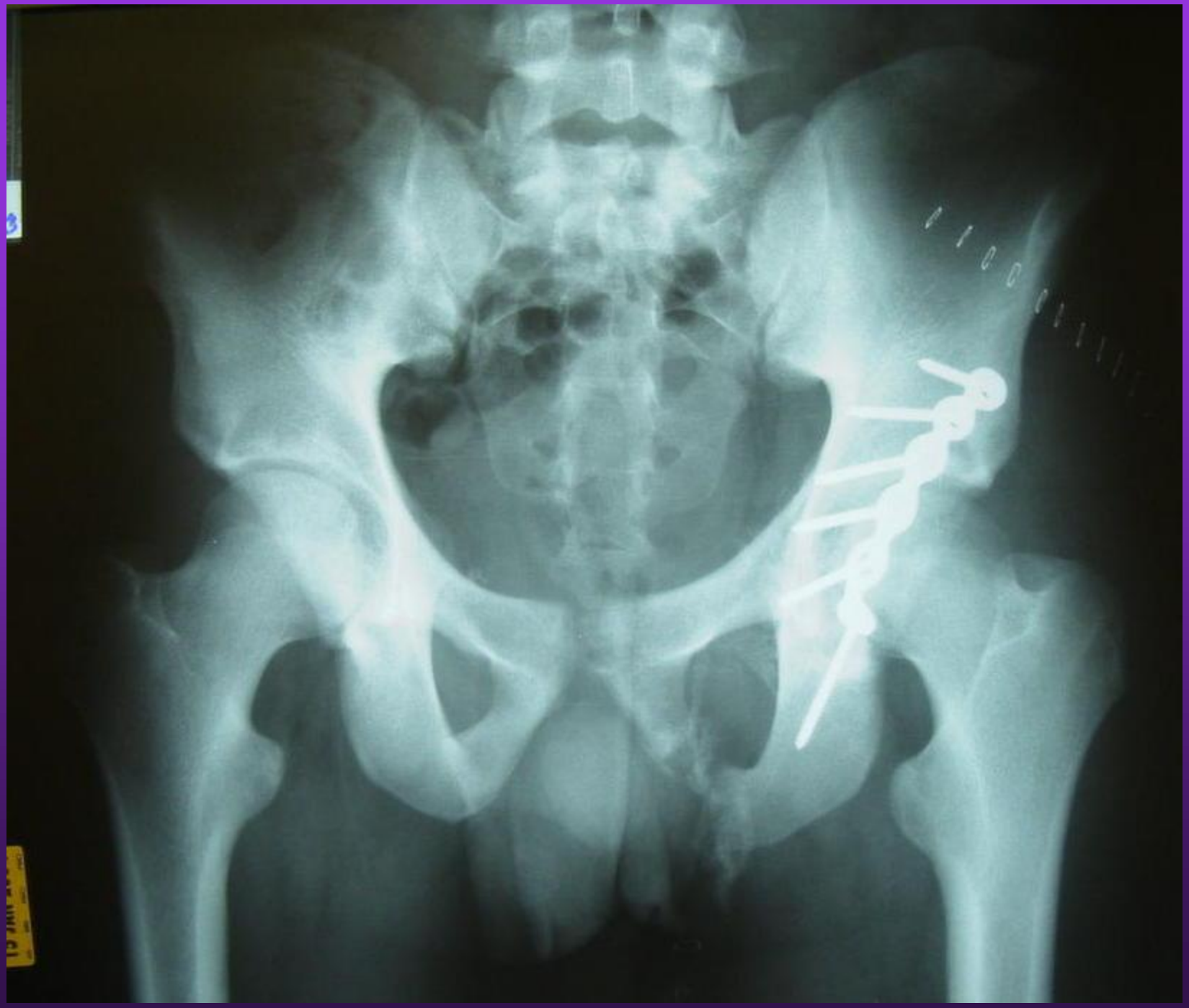






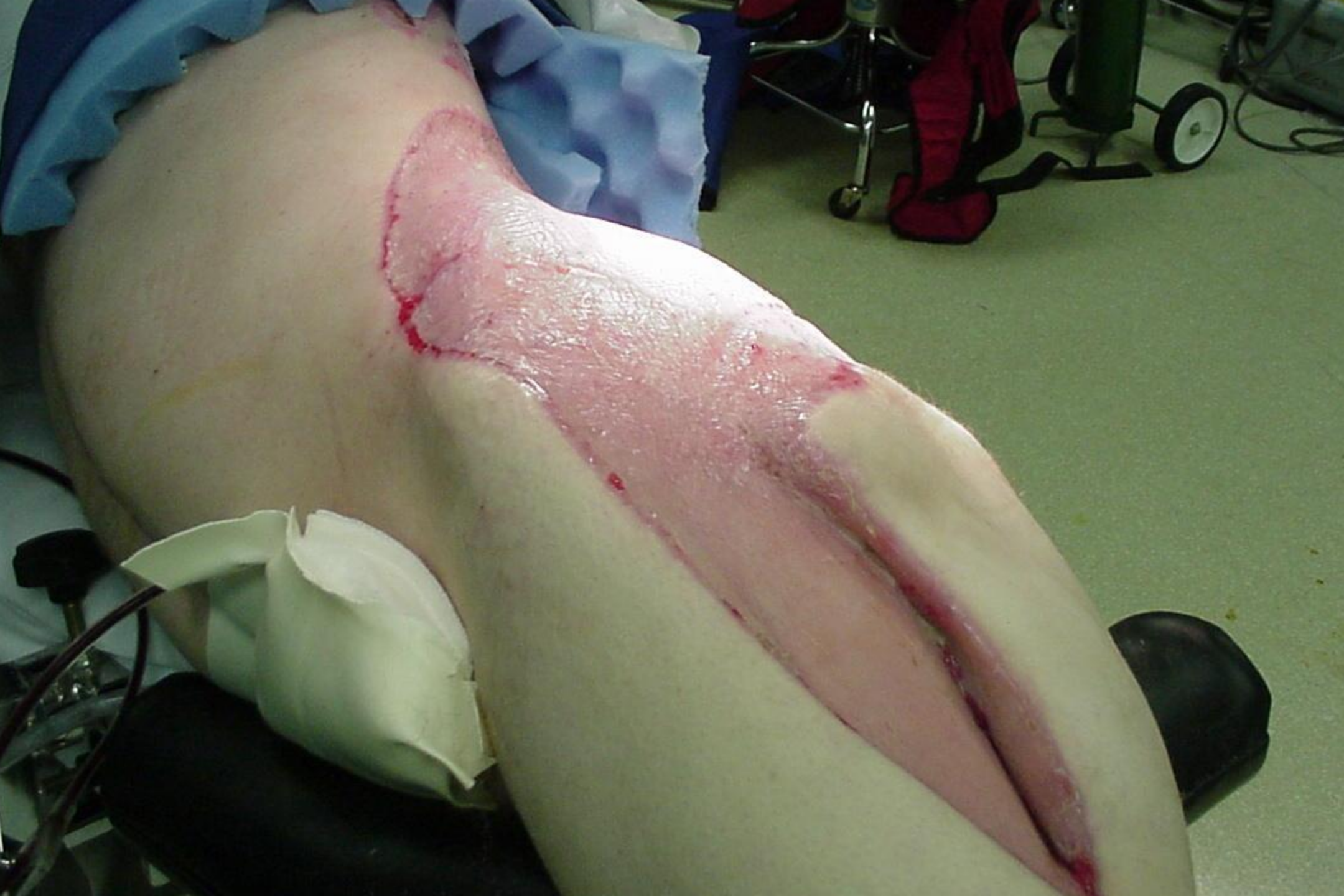


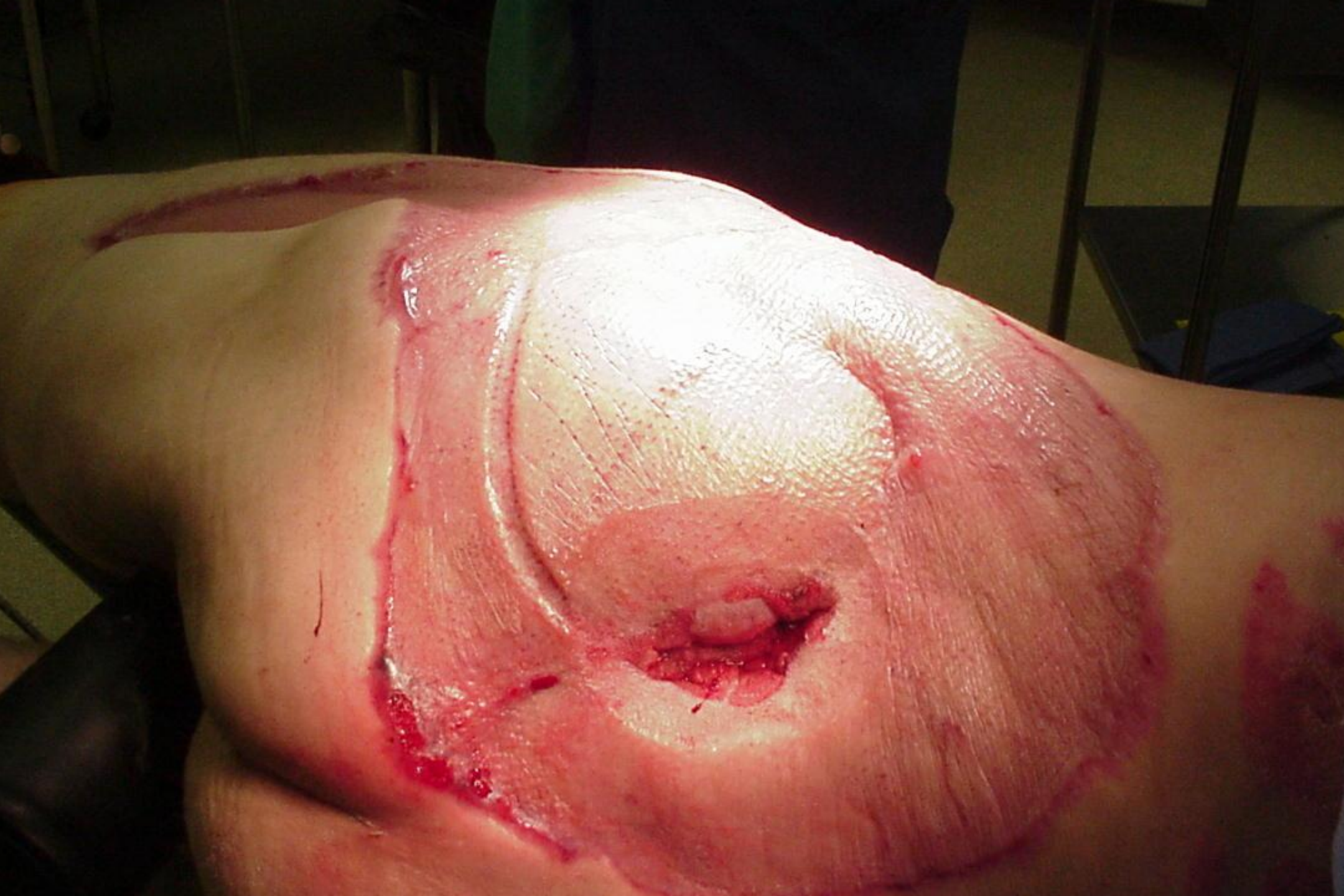




MOREL – LAVALLE' LESION (Skin Degloving)

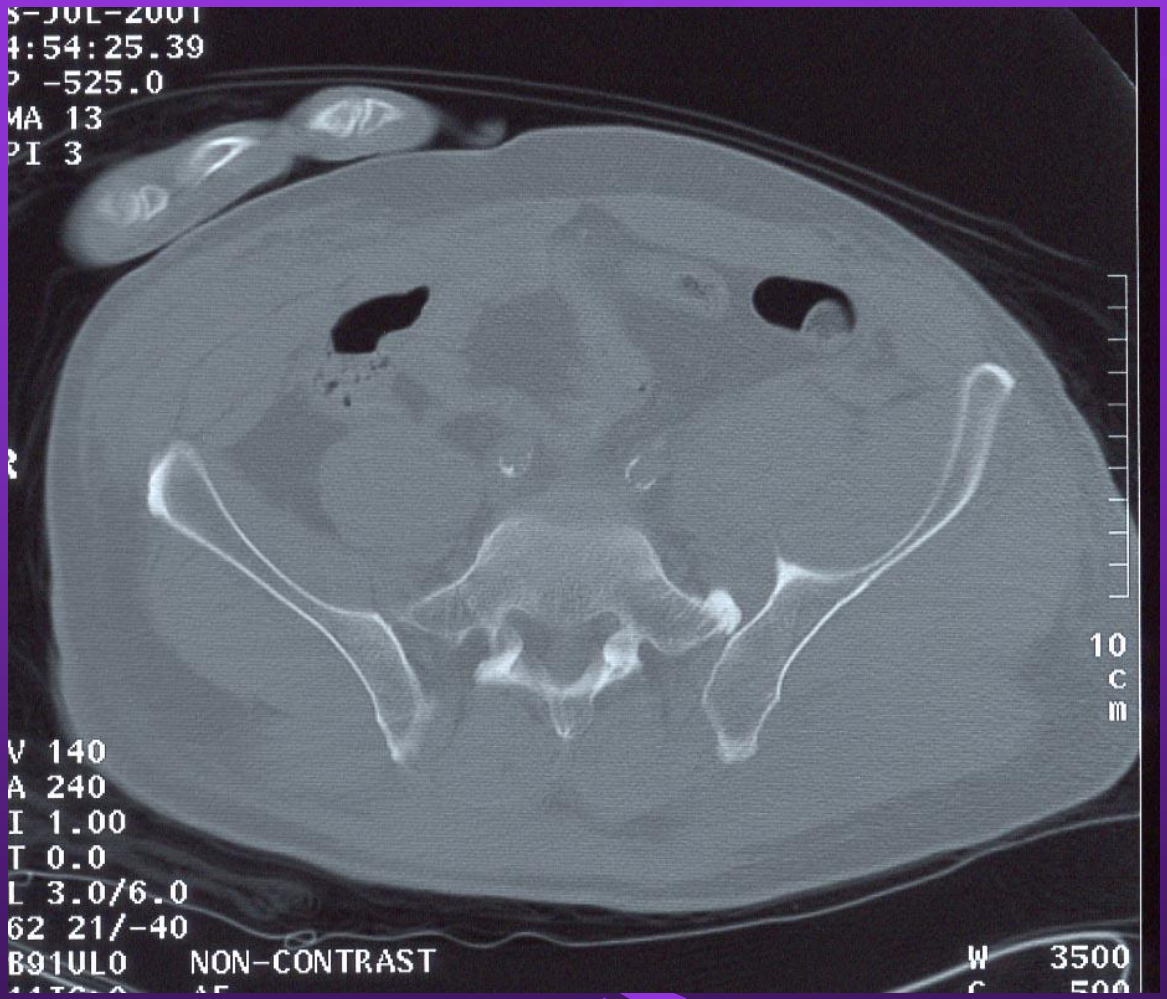
- Infected in 1/3 of cases
- Require thorough debridement prior to definitive surgery



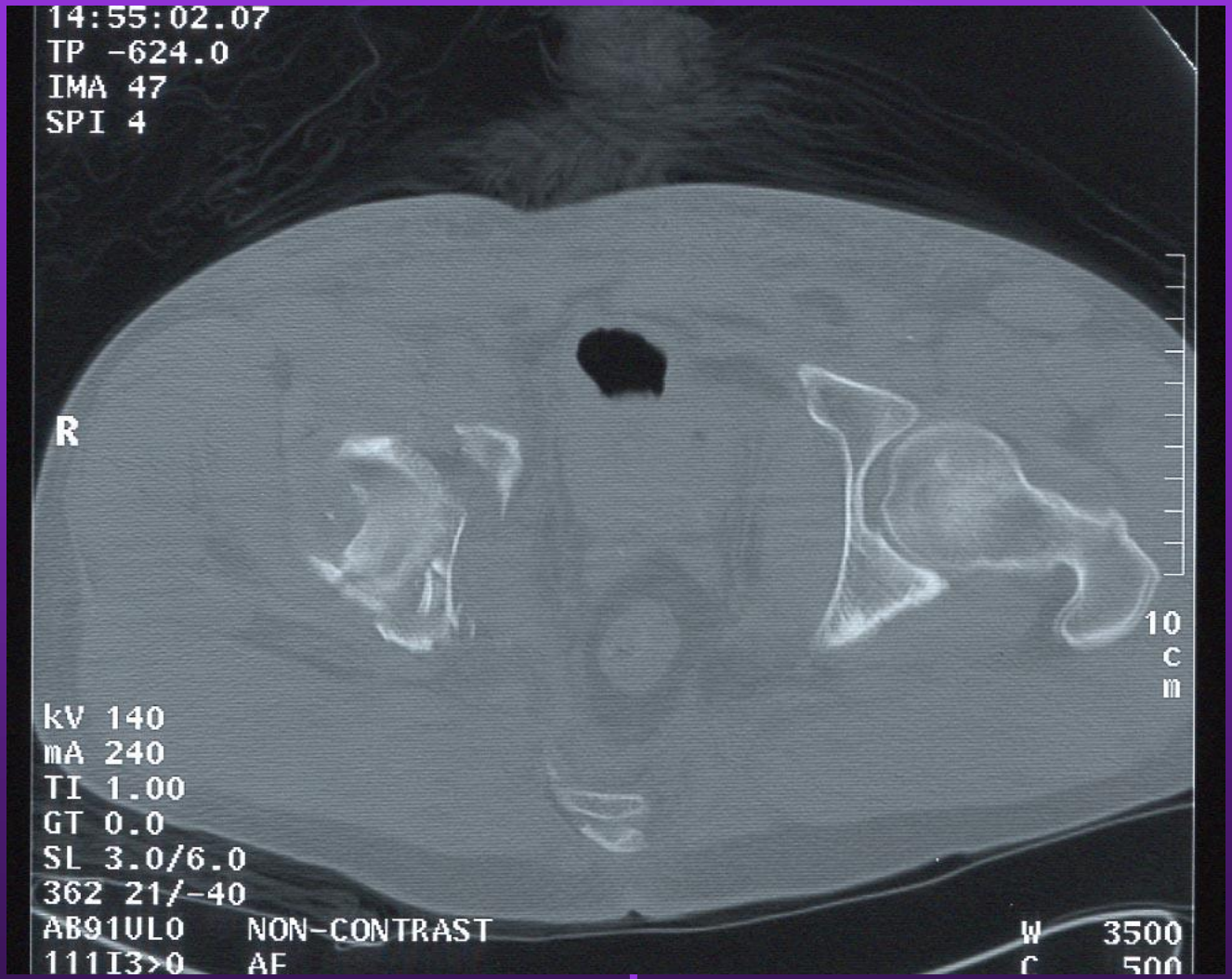


JA

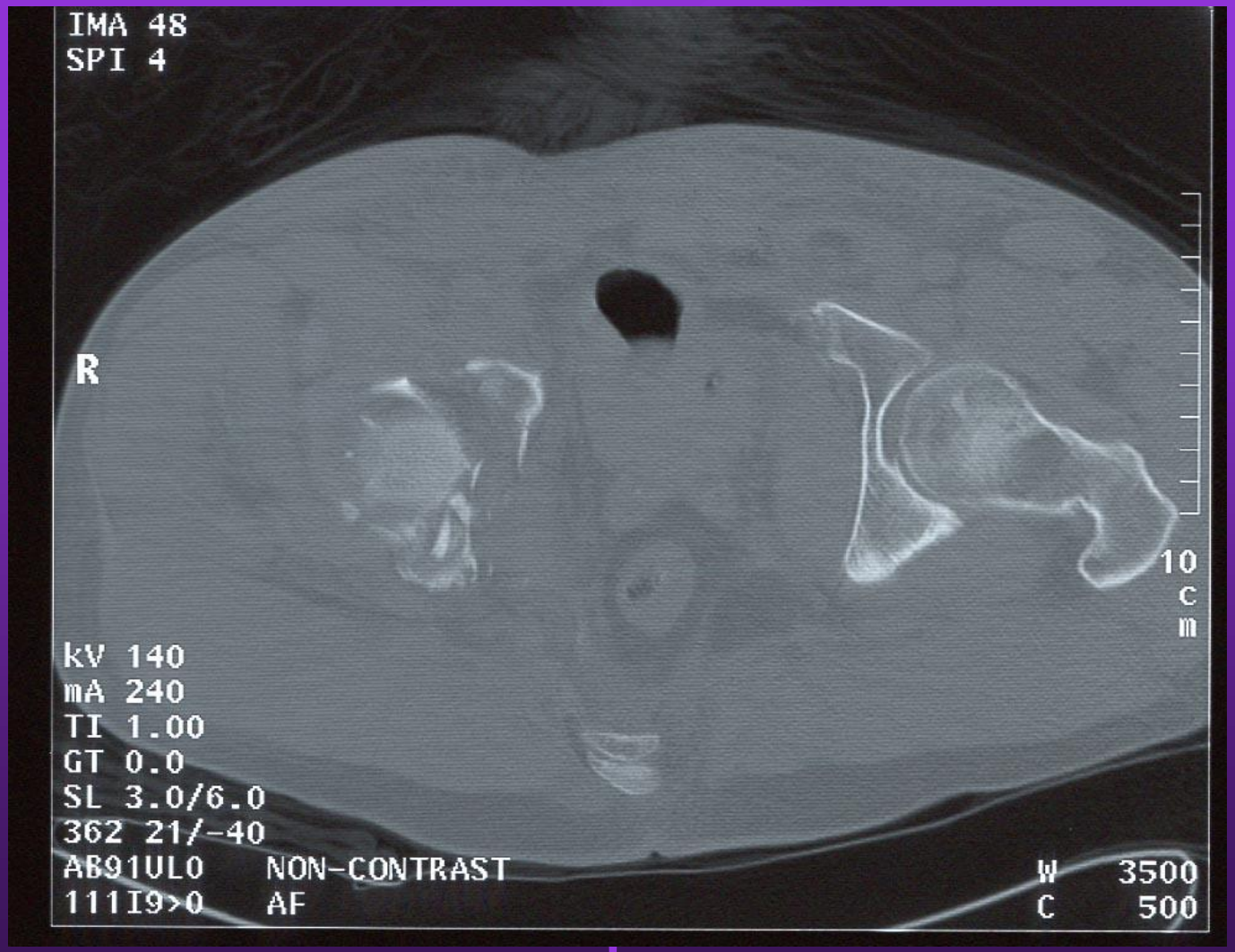
JA


4:54:25.39
-525.0
MA 13
PI 3
10
cm
V 140
A 240
I 1.00
T 0.0
L 3.0/6.0
62 21/-40
B91ULO NON-CONTRAST
W 3500

JA


14:55:02.07
TP -624.0
IMA 47
SPI 4
R
10
c
m
kV 140
mA 240
TI 1.00
GT 0.0
SL 3.0/6.0
362 21/-40
AB91ULO NON-CONTRAST
W 3500

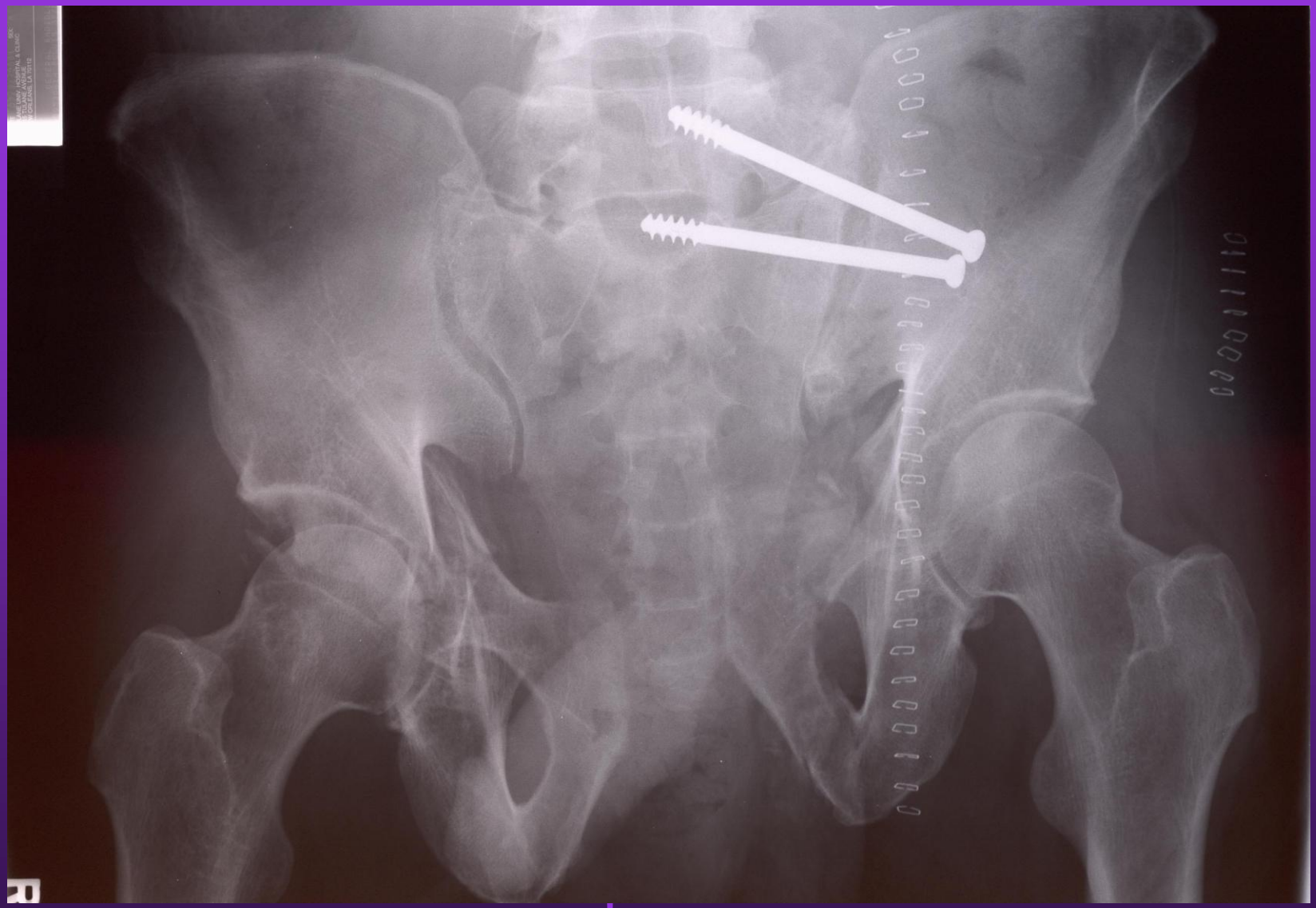
JA


IMA 48
SPI 4
R
10
c
m
kV 140
mA 240
TI 1.00
GT 0.0
SL 3.0/6.0
362 21/-40
AB91UL0 NON-CONTRAST
111I9>0 AF
W 3500
C 500

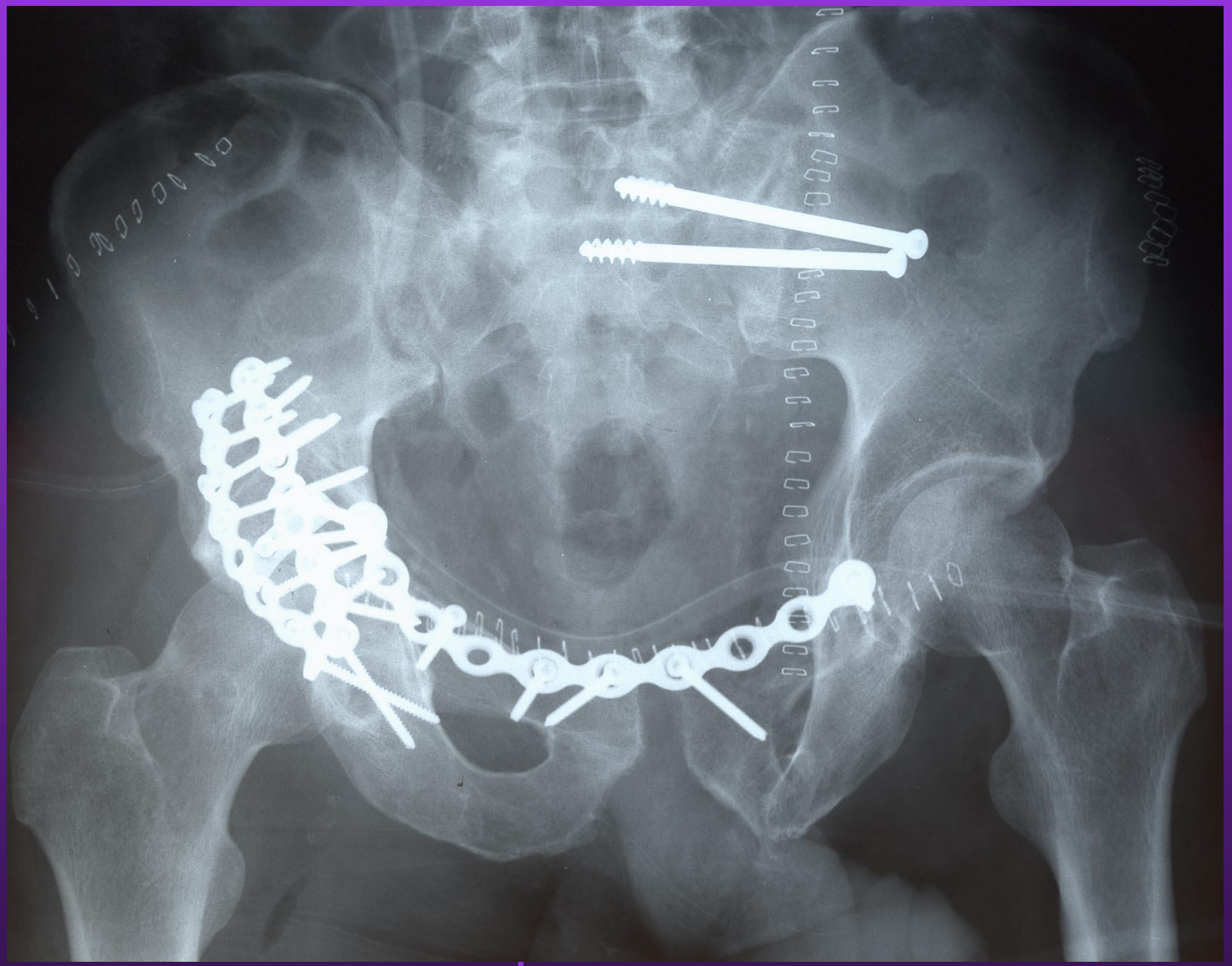
4 Stage Reconstruction

- Anterior – release of L SI joint, symphysis, ant column R
- Posterior – L SI joint release, reduction, and fixation
- EIF – Release of posterior column and ORIF of “T” PW
- Anterior – ORIF of symphysis

JA

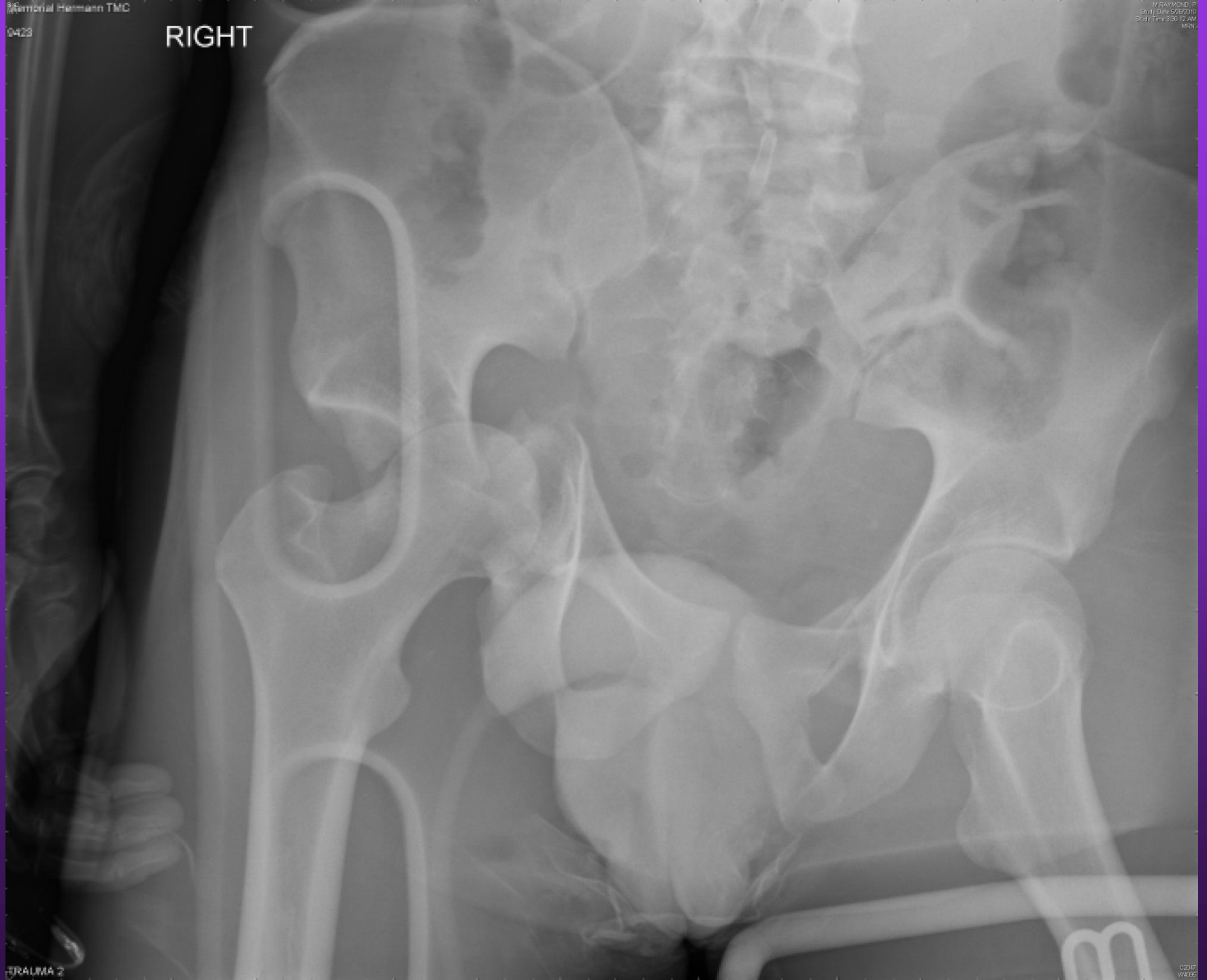


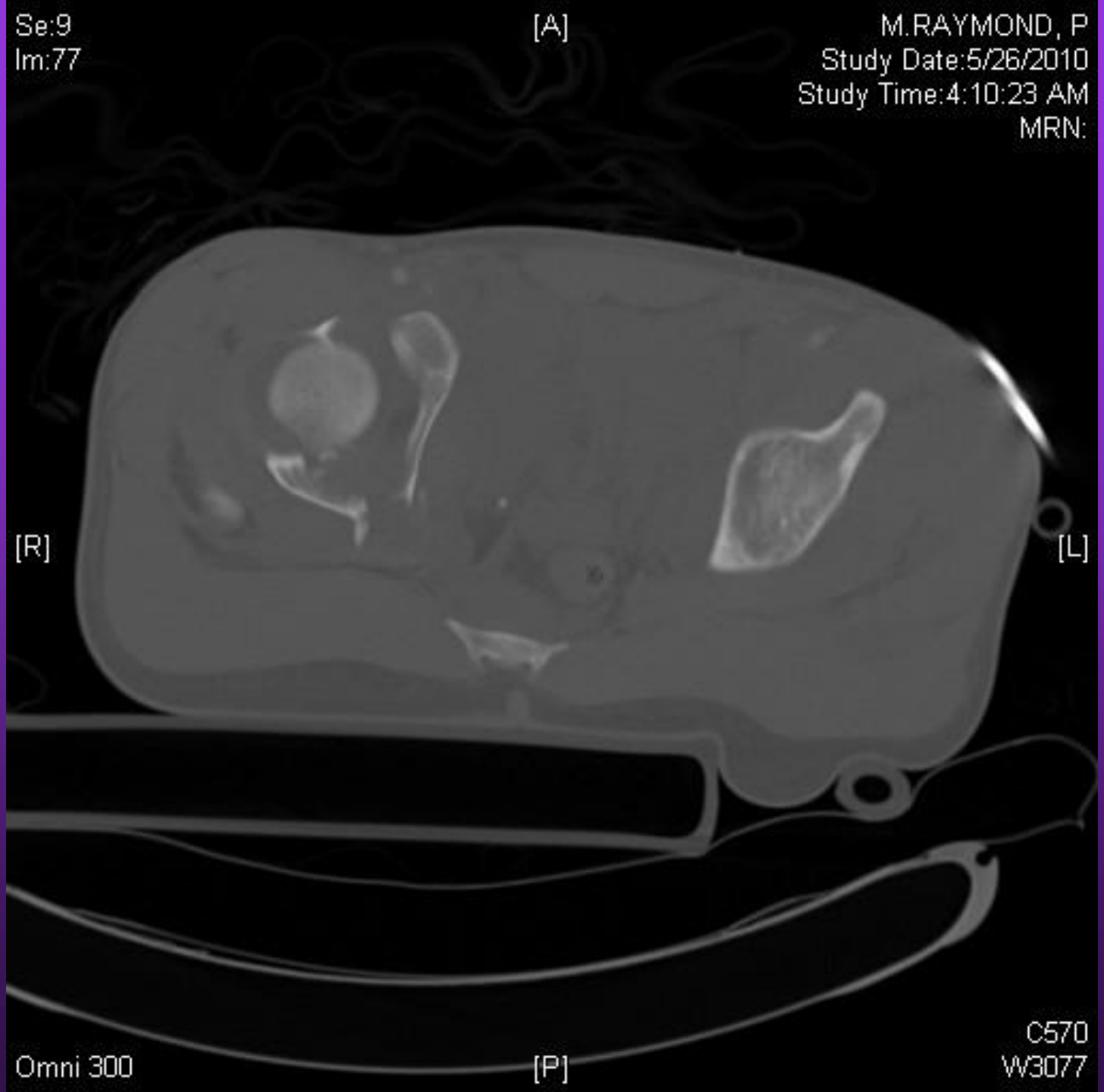
JA

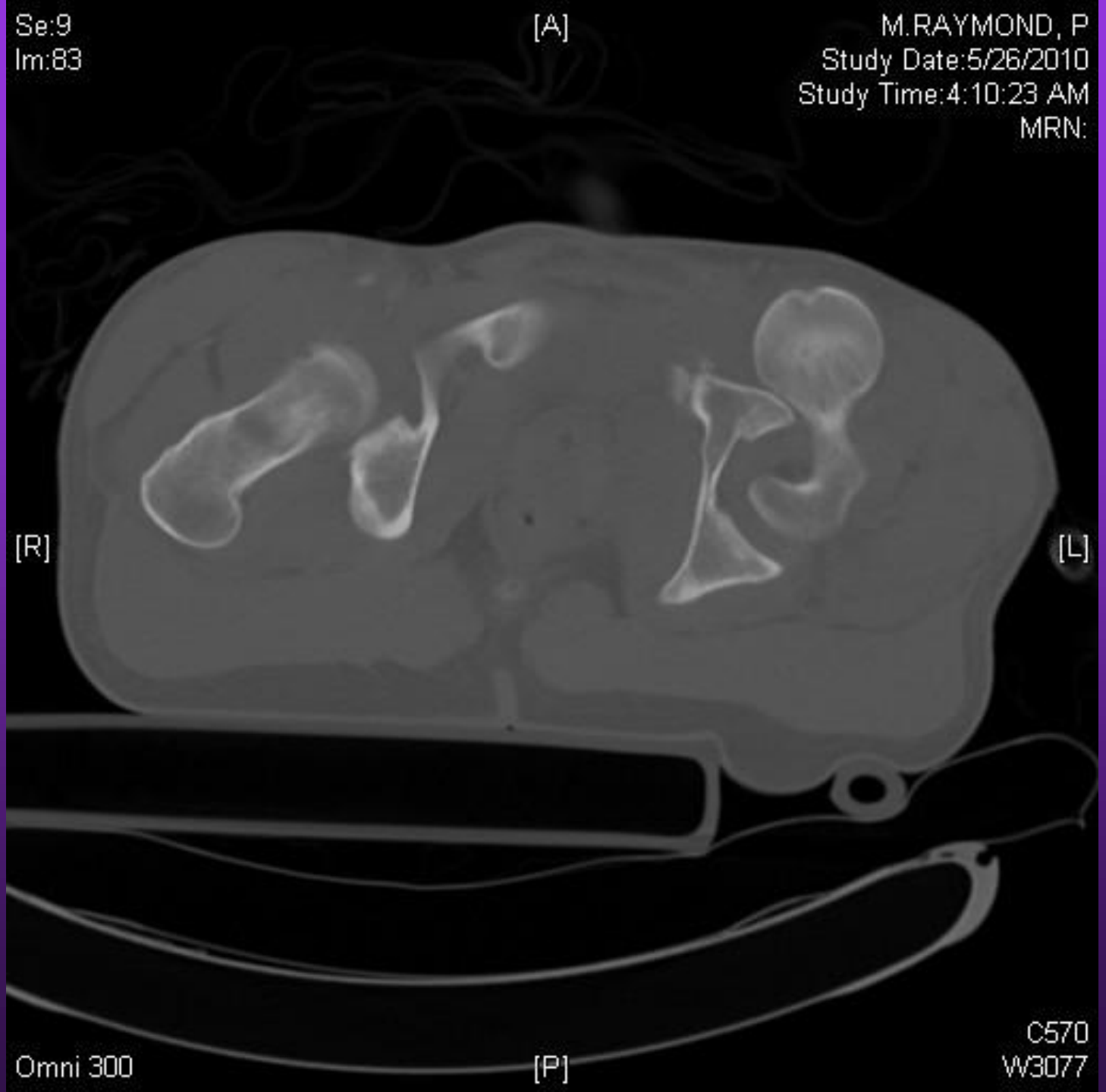


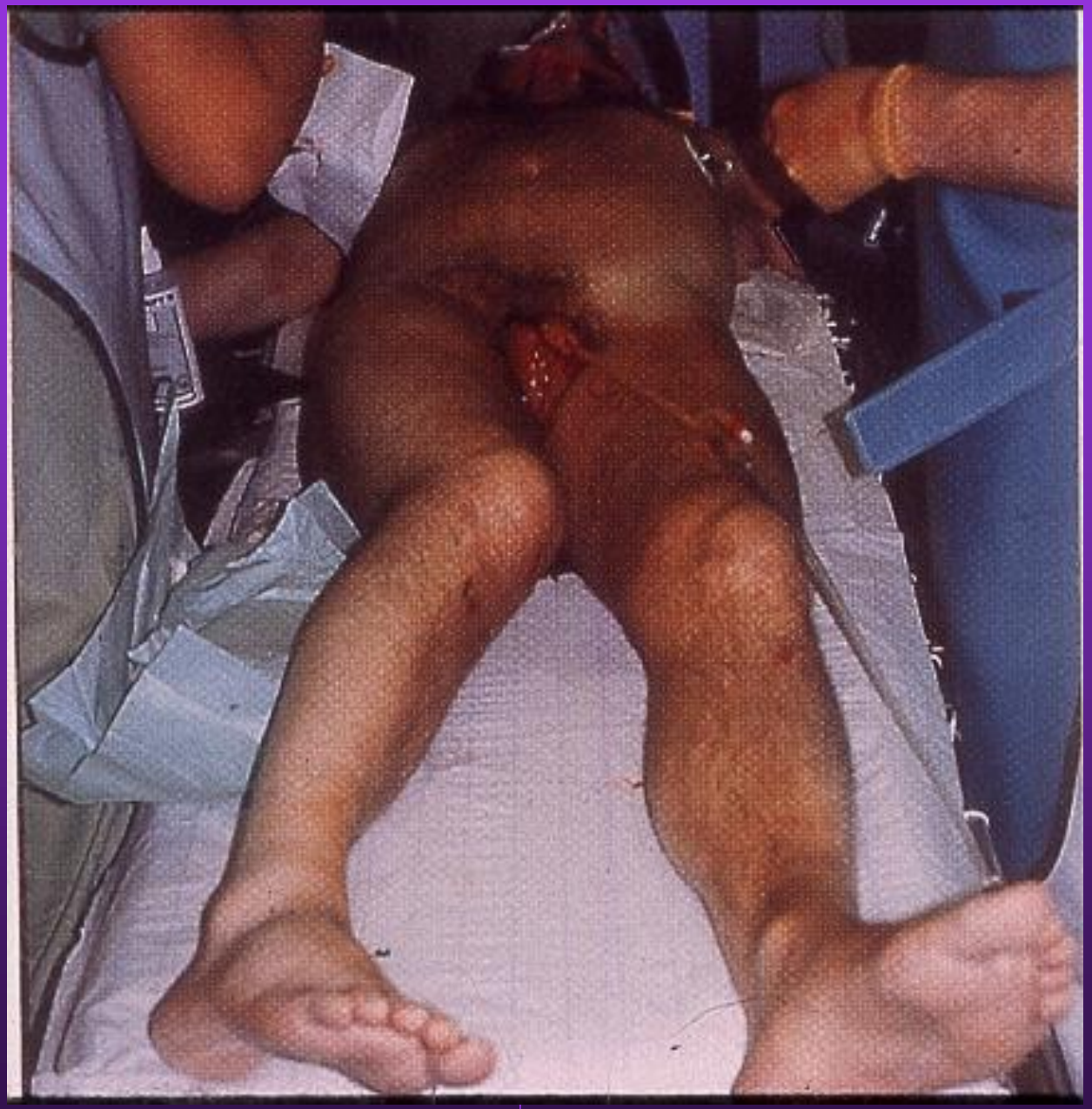
Dislocated Hip

- Emergent reduction (6-12 hrs) general anesthesia preferred
- Central subluxation with Tr, BC, T-type or ACPHT-Distal femur skeletal traction

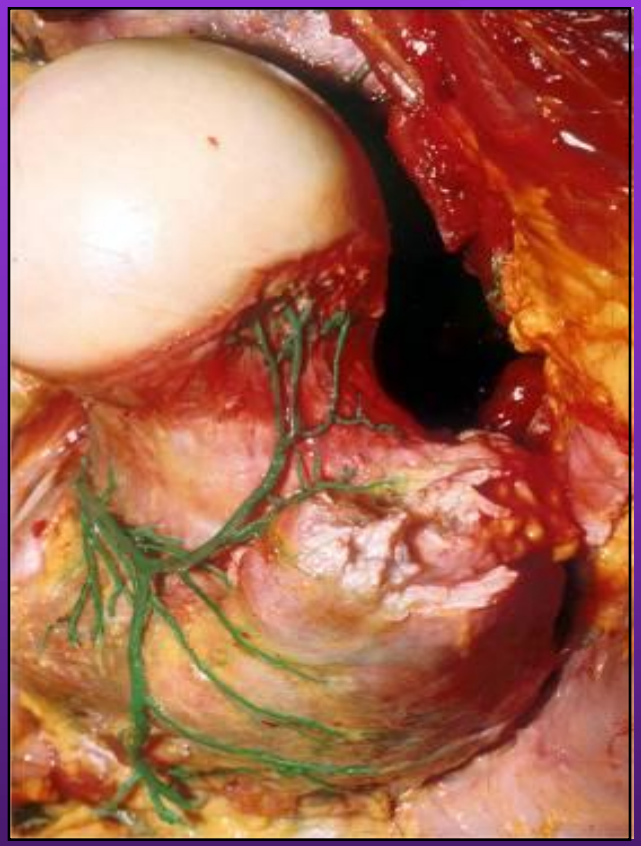

Memorial Hermann TMC
0423
RIGHT
TRAUMA 2


Se:9
Im:77
[A]
M.RAYMOND, P
Study Date:5/26/2010
Study Time:4:10:23 AM
MRN:
[R]
[L]
Omni 300
[P]
C570
W3077

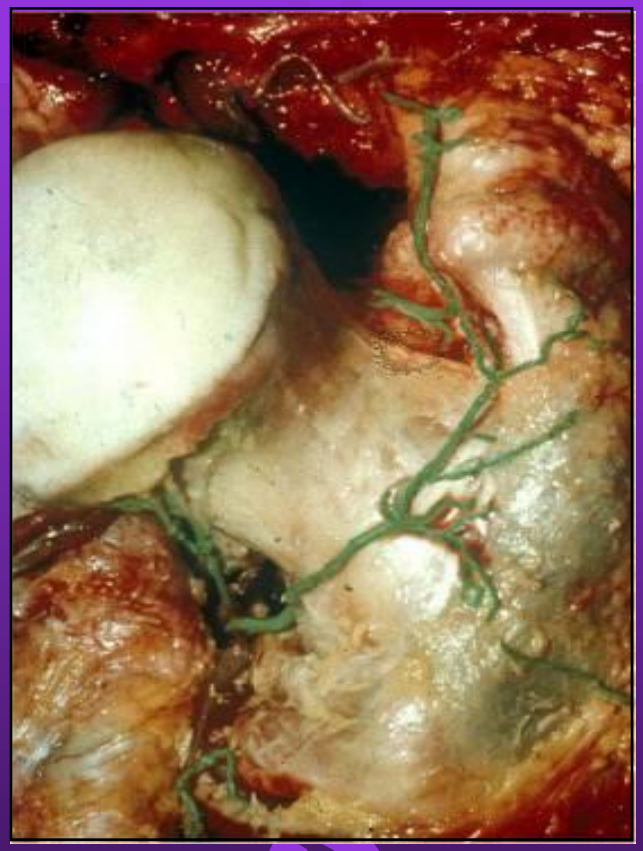

Se:9
Im:83
[A]
M.RAYMOND, P
Study Date:5/26/2010
Study Time:4:10:23 AM
MRN:
[R]
[L]
Omni 300
[P]
C570
W3077



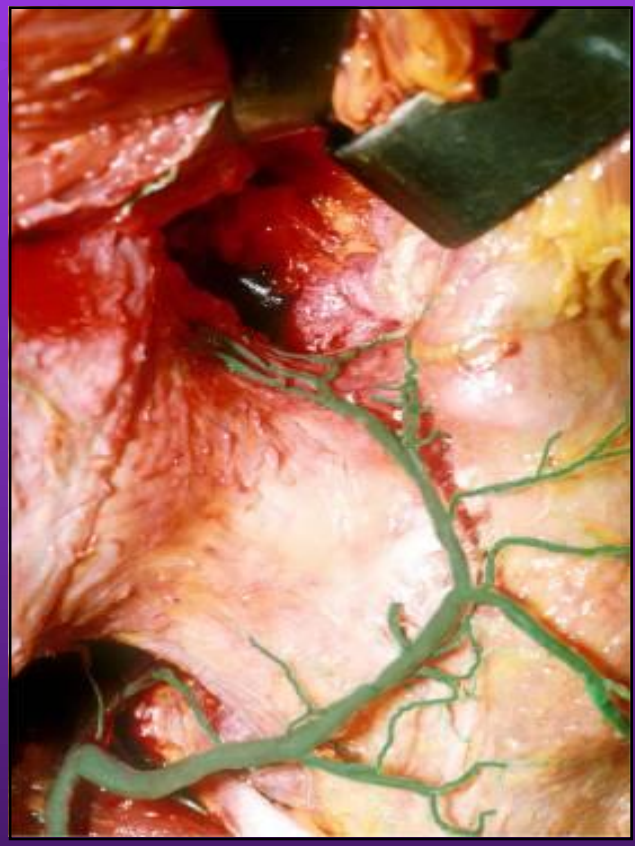
Terminal subsynovial (retinacular) vessels



Superior type

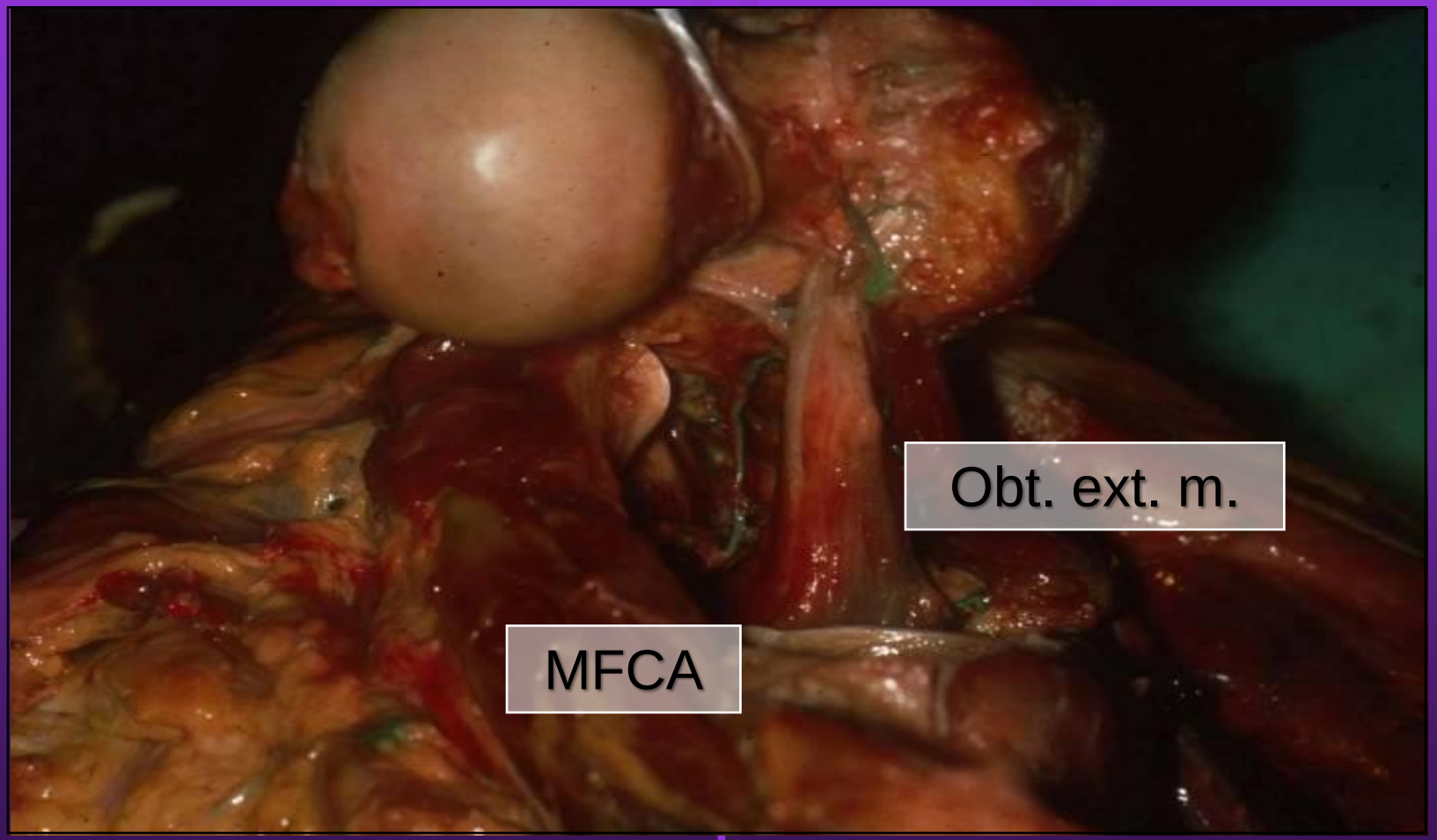


Mixed



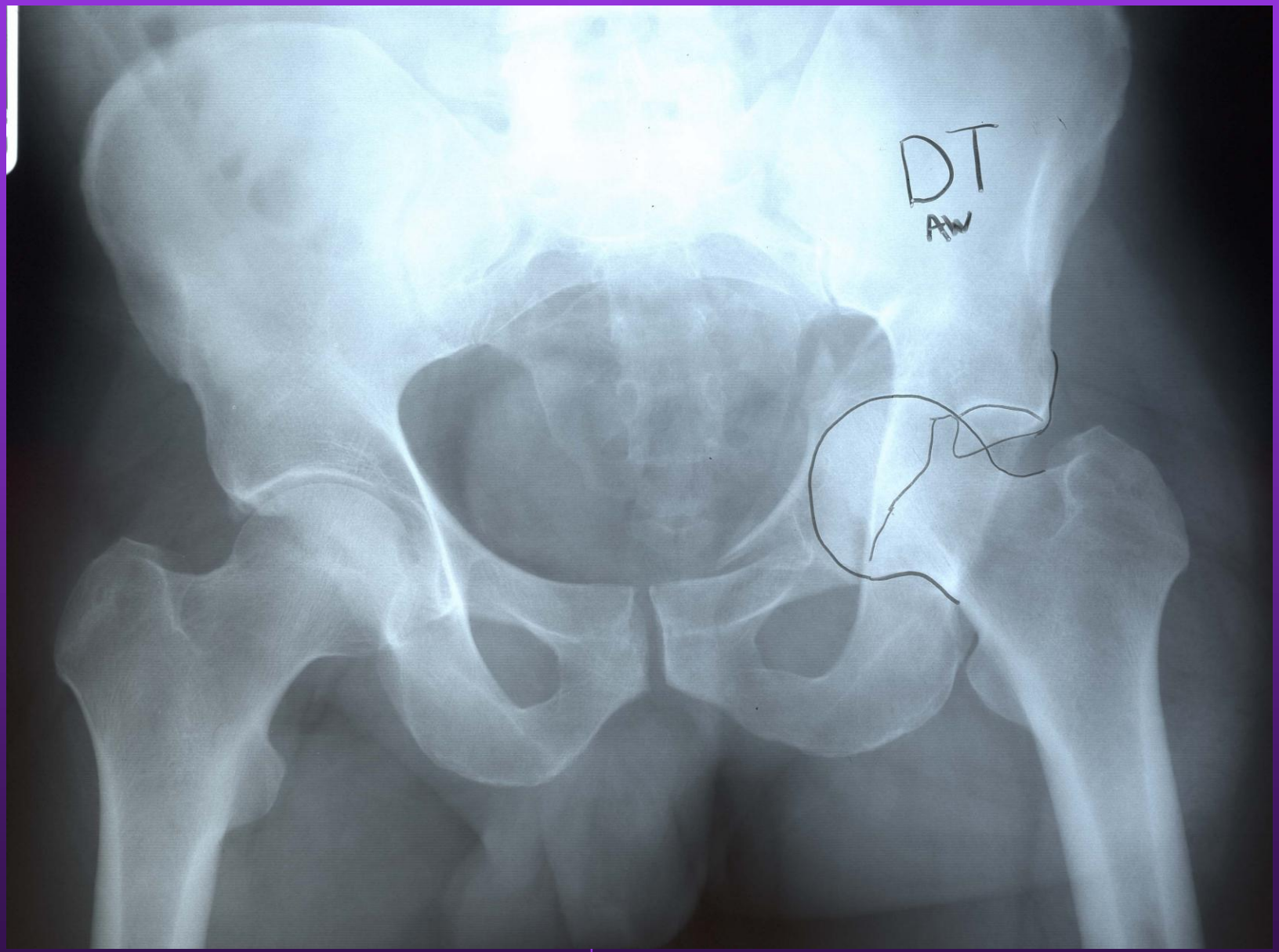
Post. neck free of vessels

Obt. ext. m. protects MFCA

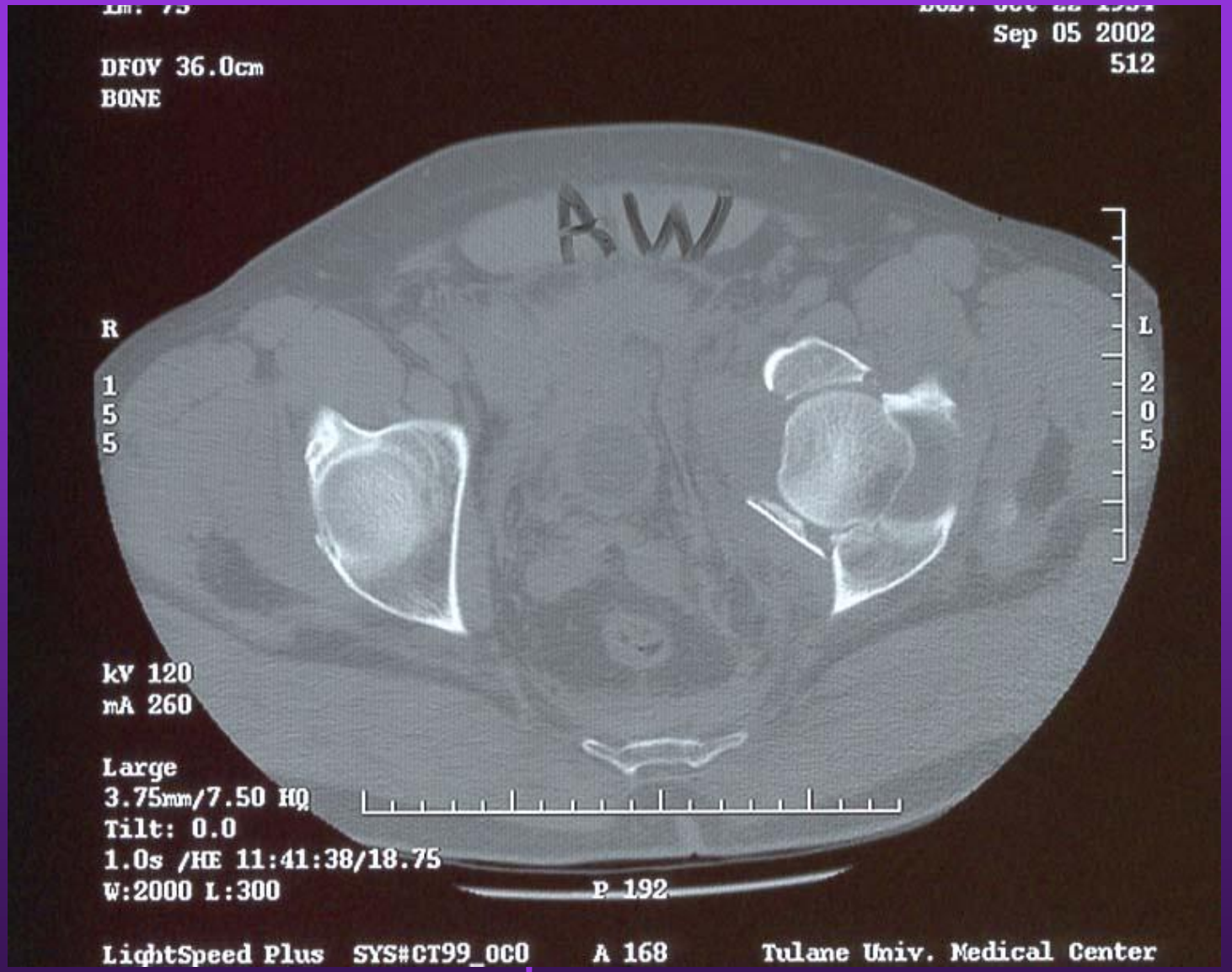


Gautier et al., *JBJS*, **82-B:**679, 2000.

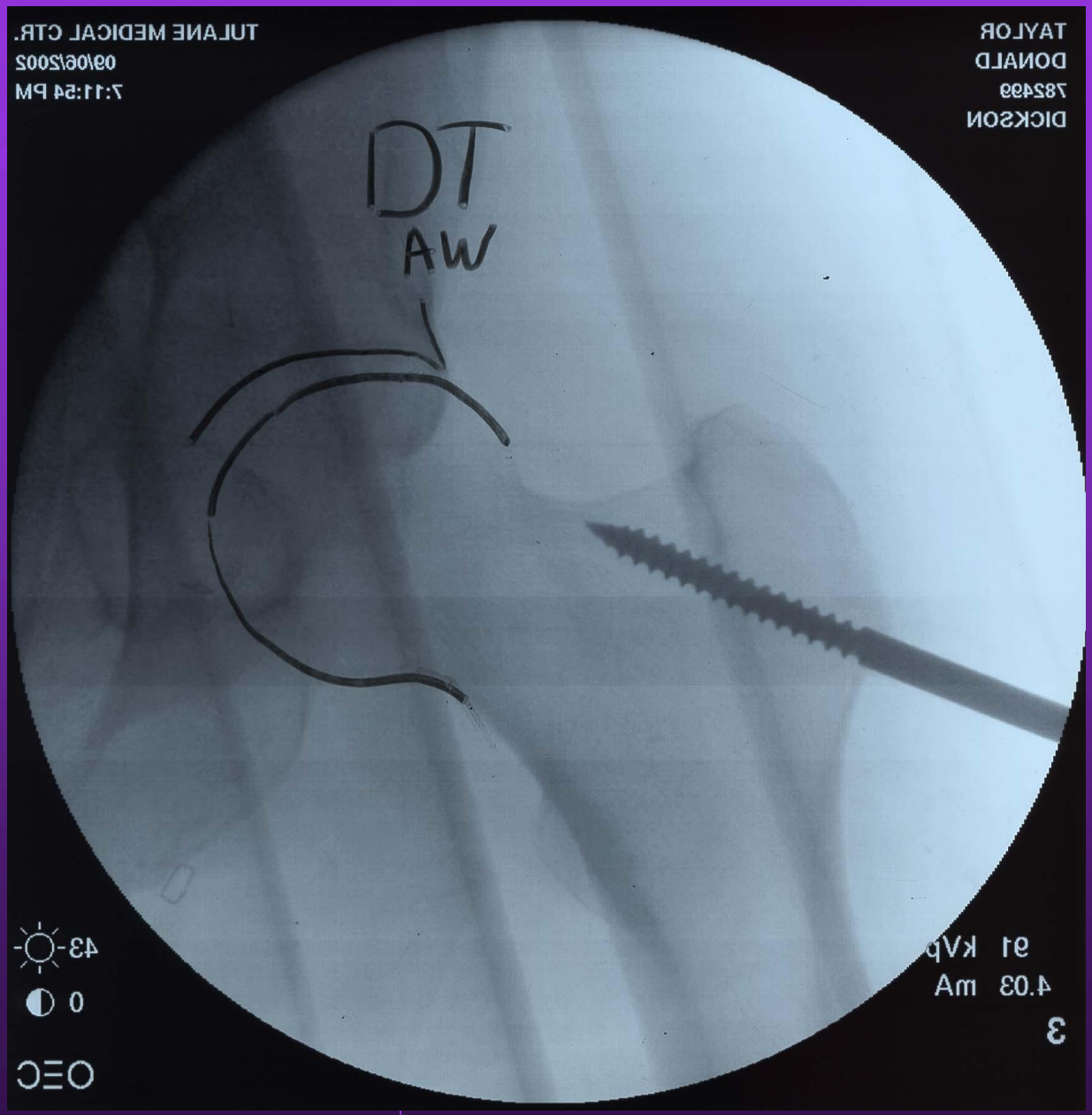
DT-9/4/02

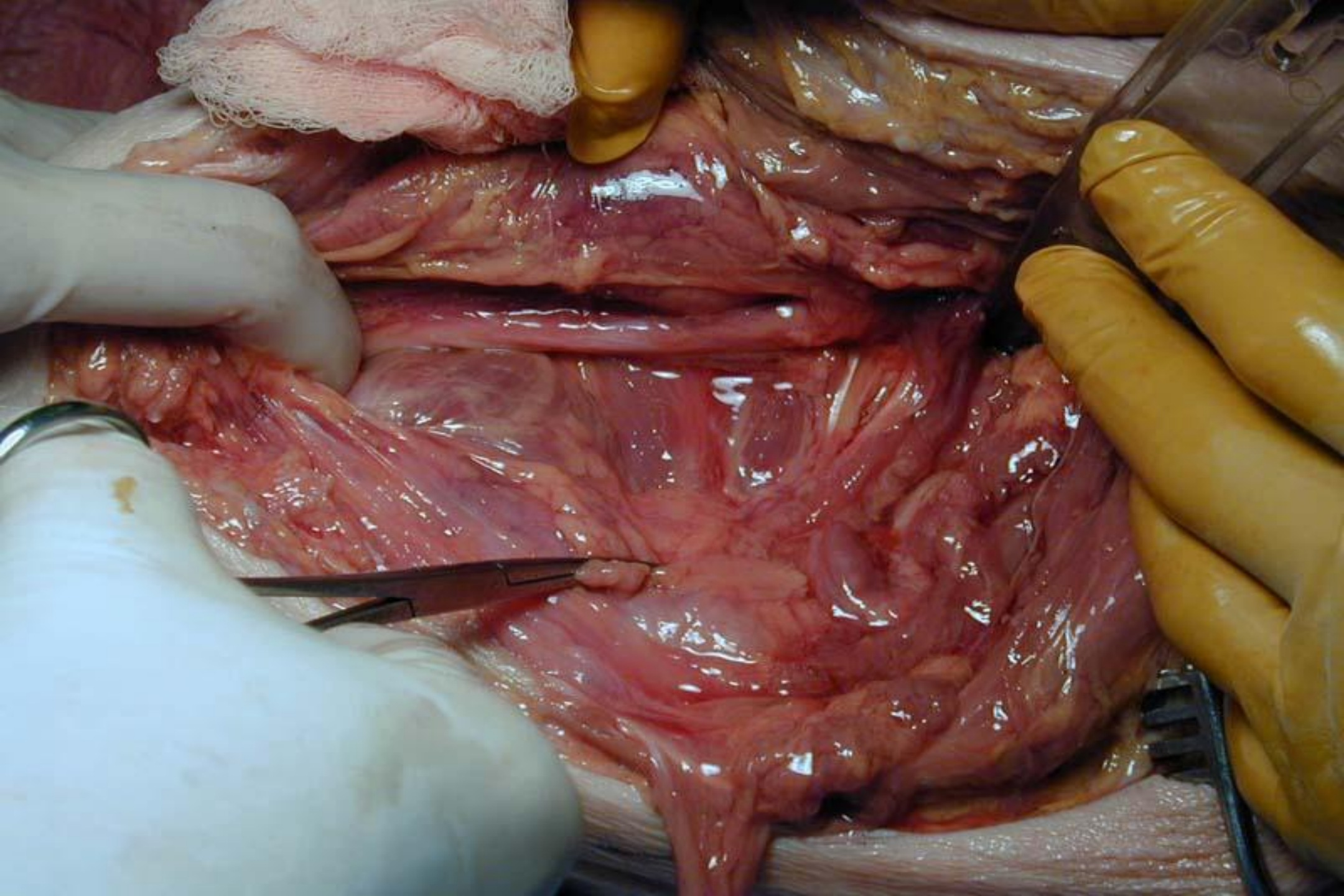


DT-9/5/02


Sep 05 2002
512
DFOV 36.0cm
BONE
AW
R
L
155
205
kV 120
mA 260
Large
3.75mm/7.50 HQ
Tilt: 0.0
1.0s /HE 11:41:38/18.75
W:2000 L:300
P 192
LightSpeed Plus SYS#CT99_0C0 A 168 Tulane Univ. Medical Center

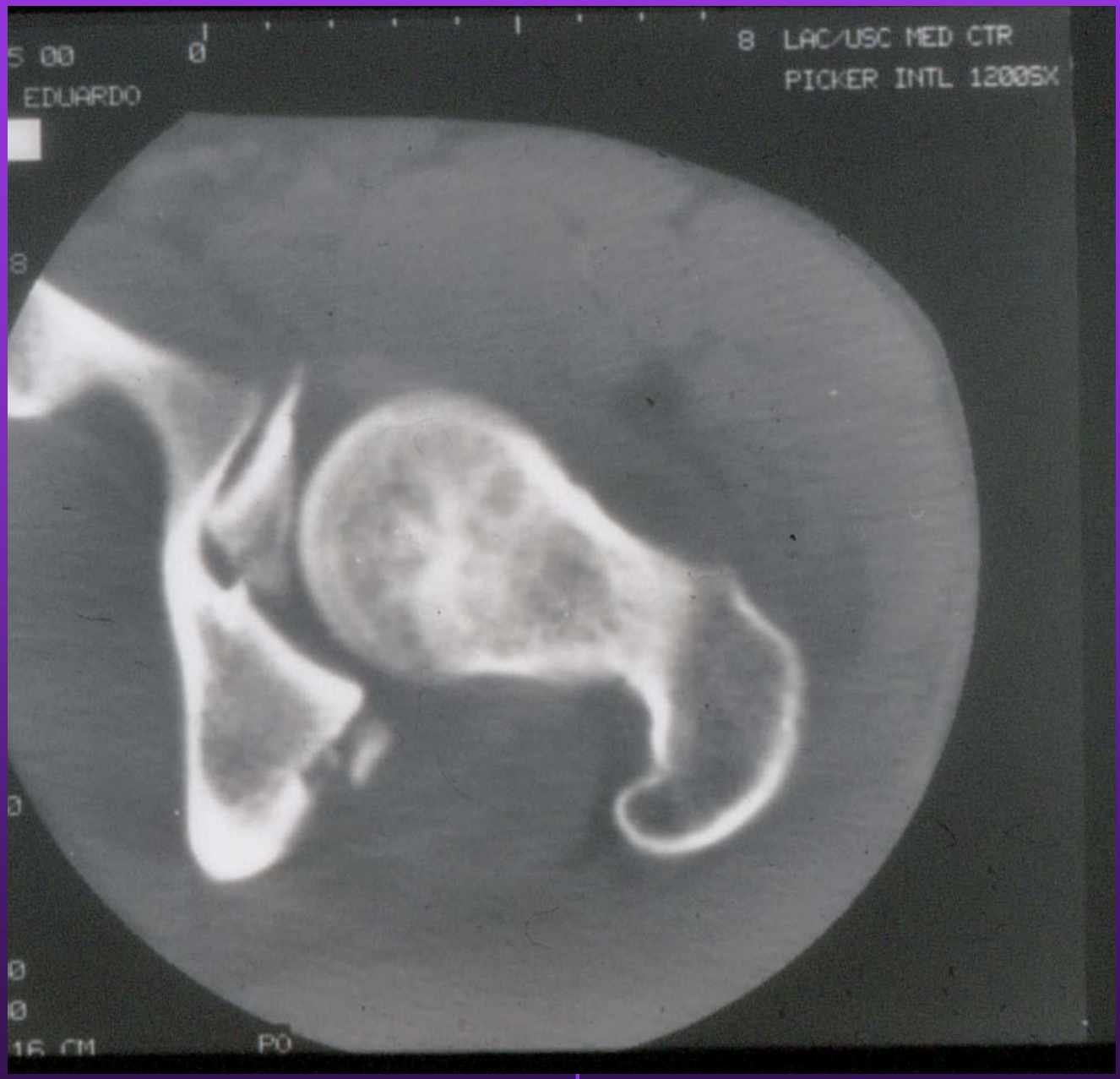
DT-9/6/02


DT
AW
TULANE MEDICAL CTR.
09/06/2002
7:11:54 PM
TAYLOR
DONALD
782499
DICKSON
91 kVp
4.03 mA
3
43
0



Emergency cont.

- Intrarticular fragments
- Associated femoral neck fracture


5 00
0
EDUARDO
8 LAC/USC MED CTR
PICKER INTL 1200SX
8
0
0
0
16 CM
PO

Closed Treatment

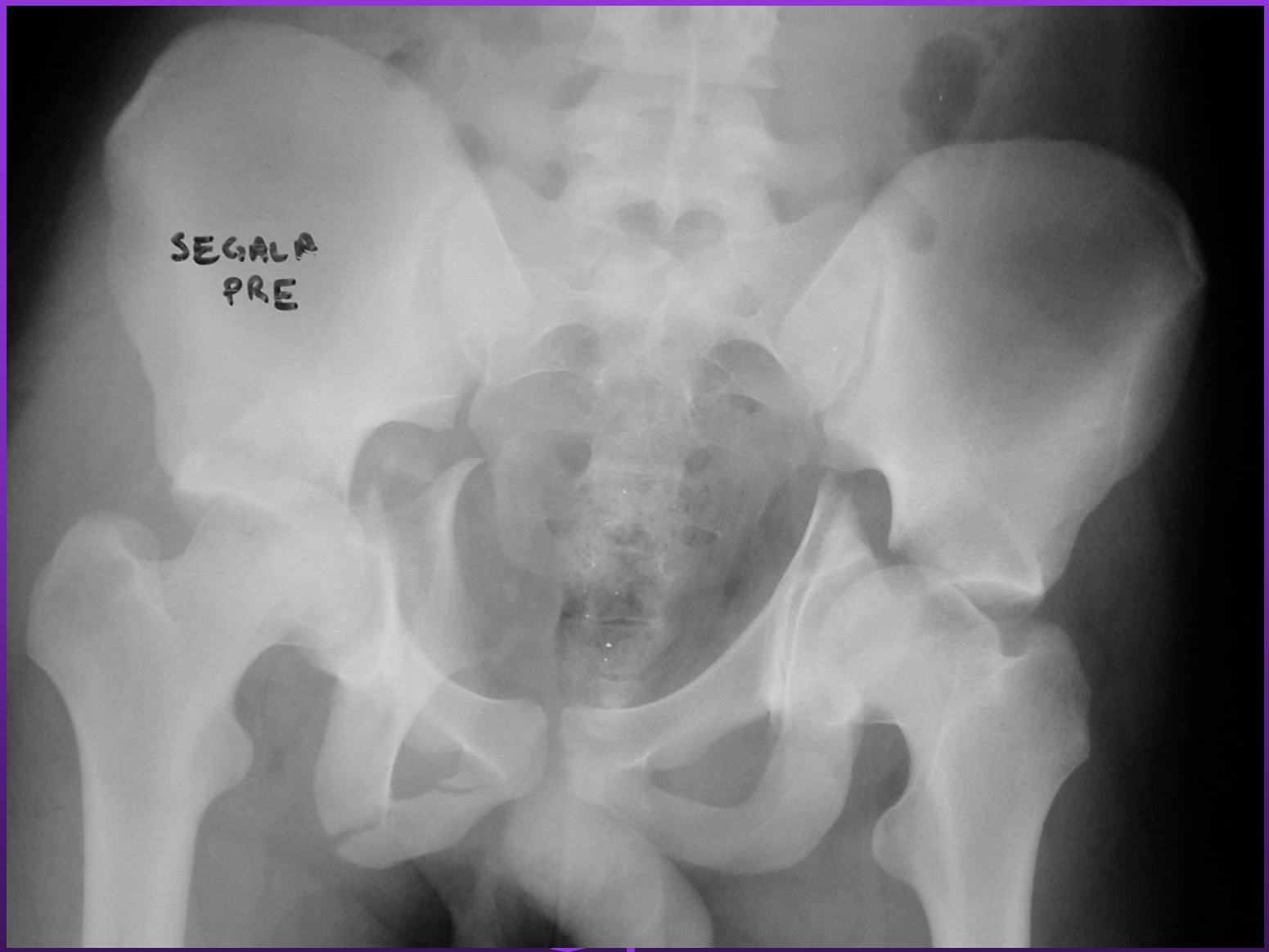
- Traction
  - Rarely indicated because rarely successful
  - If done, displaced without traction → ORIF
  - If non-displaced, traction is not needed
- Non-displaced fracture TDWB x 8 weeks
  - Watch posterior column/posterior wall carefully

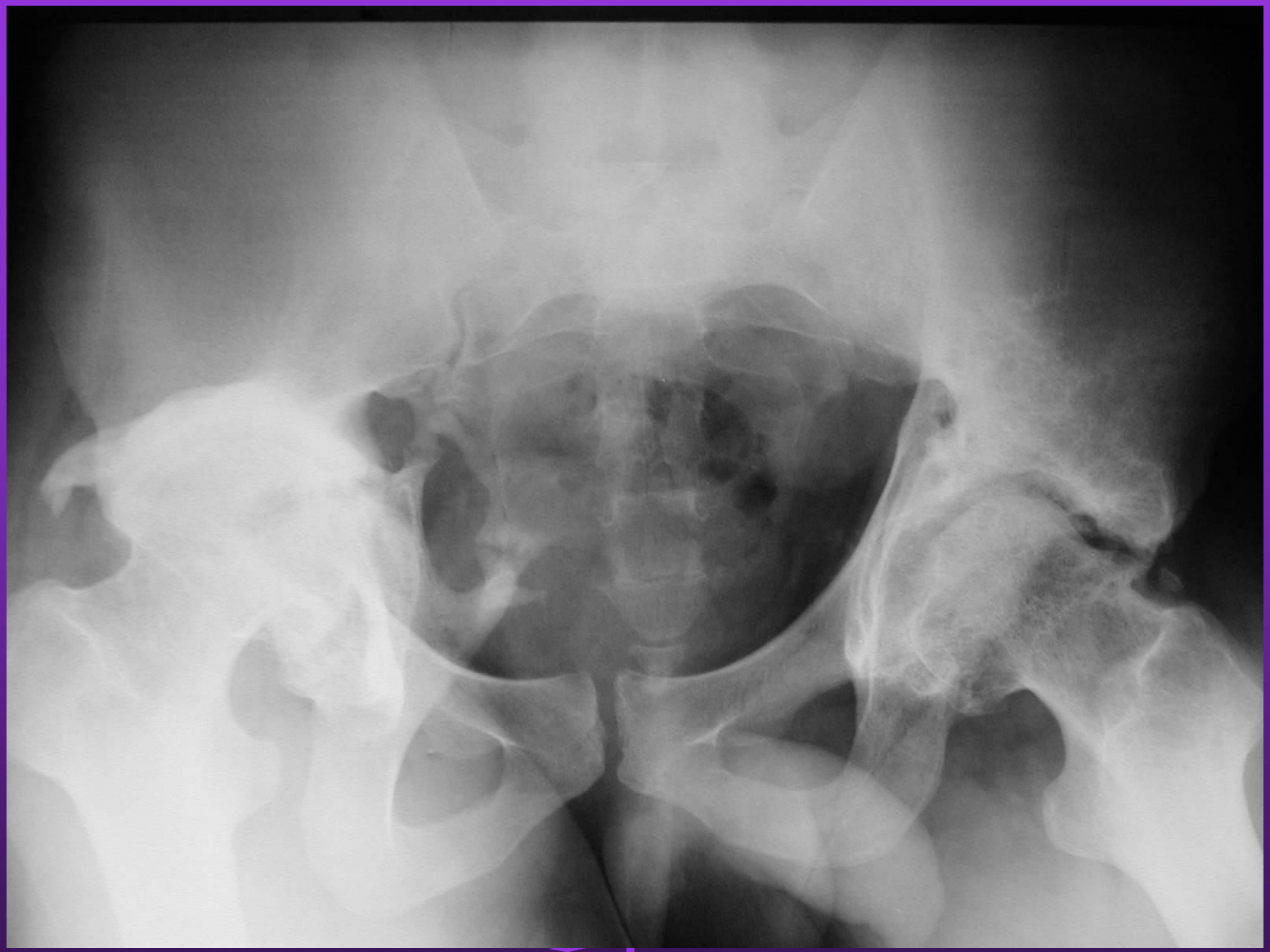
Conservative cont.

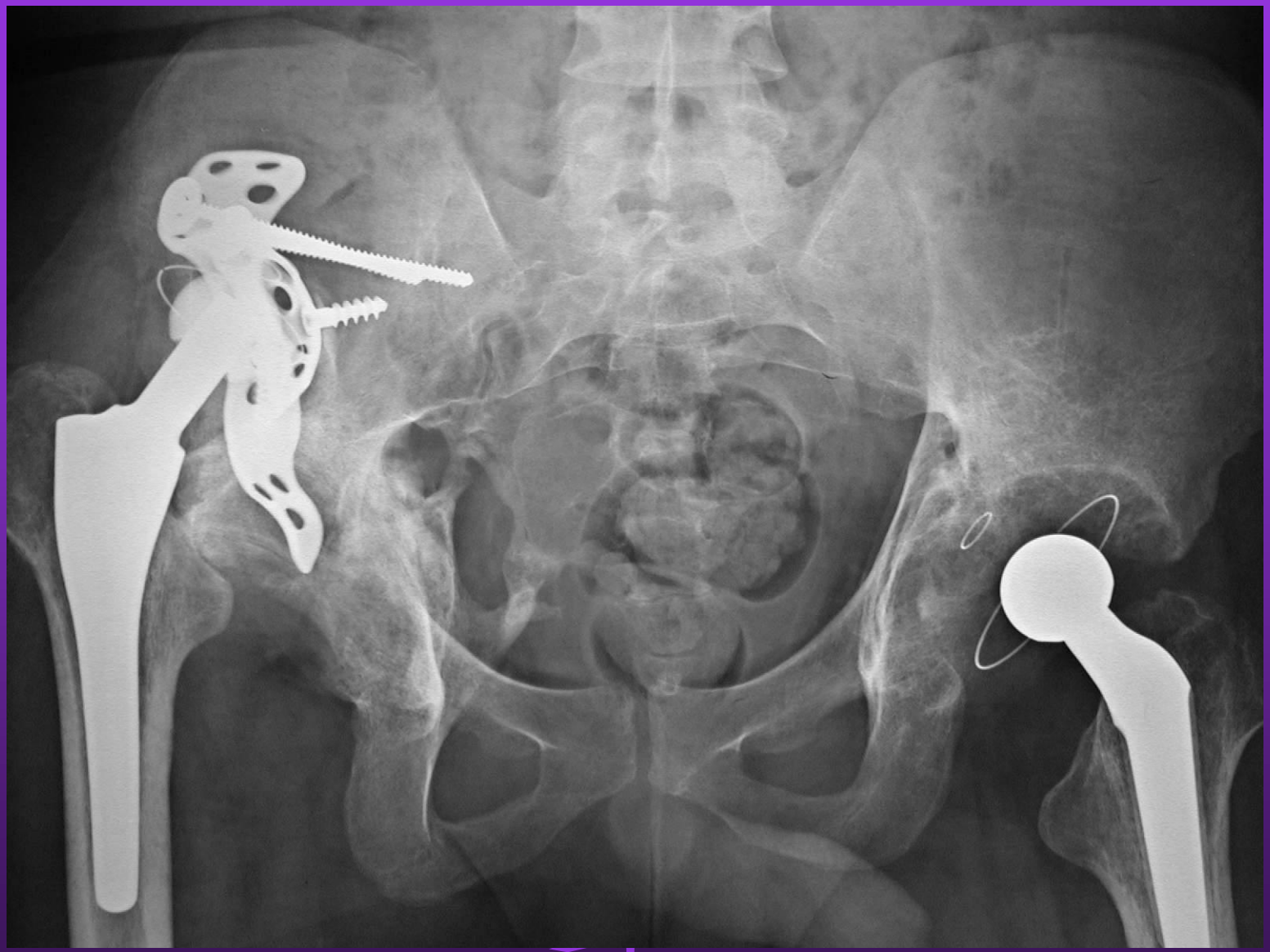
- Stable EUA (Posterior Wall fractures)
- Inexperience of the Surgeon and the team
- ?Medical contraindications
- Severe osteoporosis (Letournel)


MESSAGE
02 11:12am
85807
INTE MAIL
CLPK
CLBR
HOLD
1
ABC 2
DEF 3
GHI 4
JKL 5
MNO 6
PRS 7
TUV 8
WXY 9
OPER 0
MUTE
SPKR
Security/85531
Emergency/55555

“A MAN’S GOT TO KNOW HIS LIMITATIONS”


SEGALA
PRE





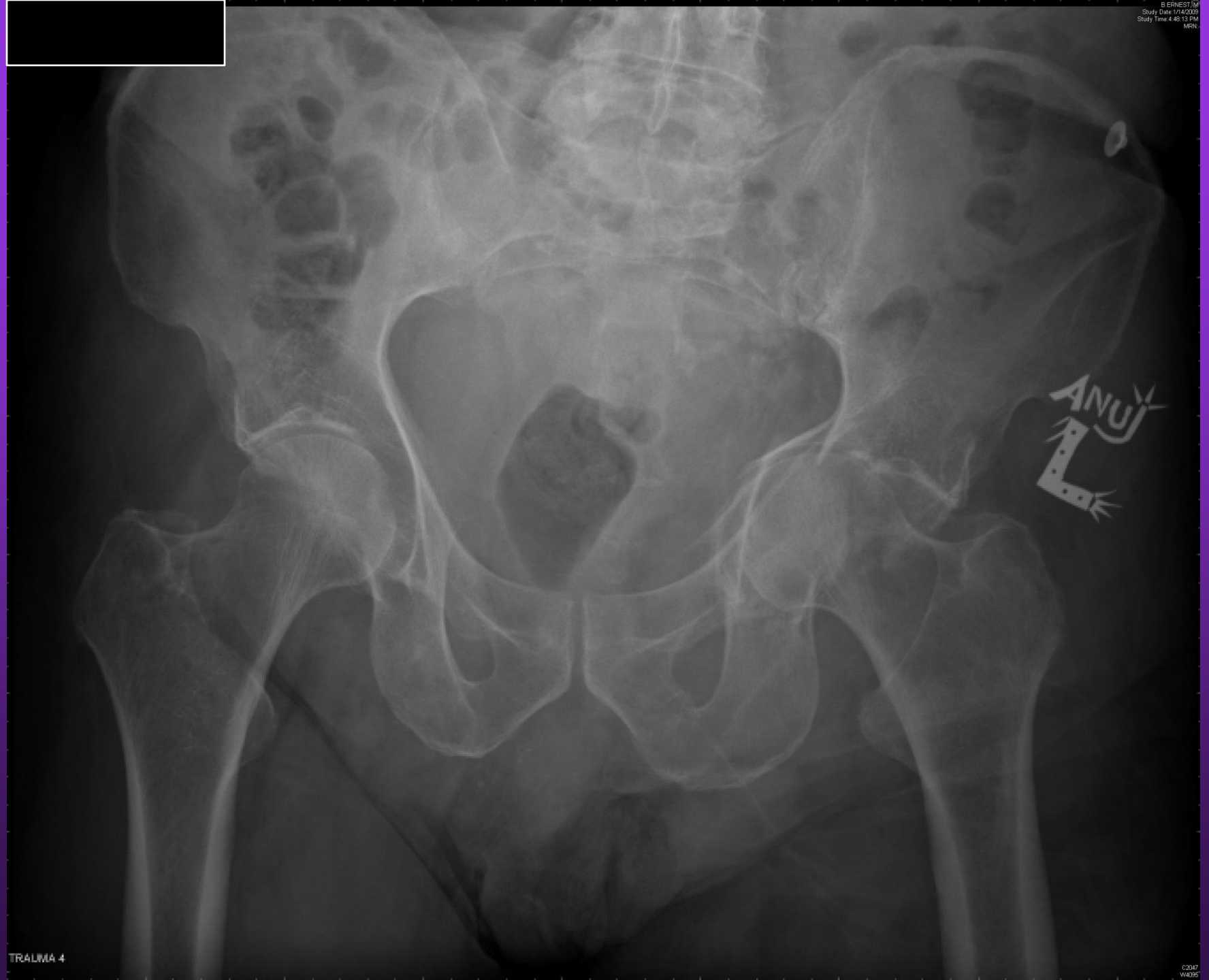
Timing of Surgery and Anatomical Reductions

- 0-7 Days 74%
- 8-14 Days 71%
- 15-21 Days 57%

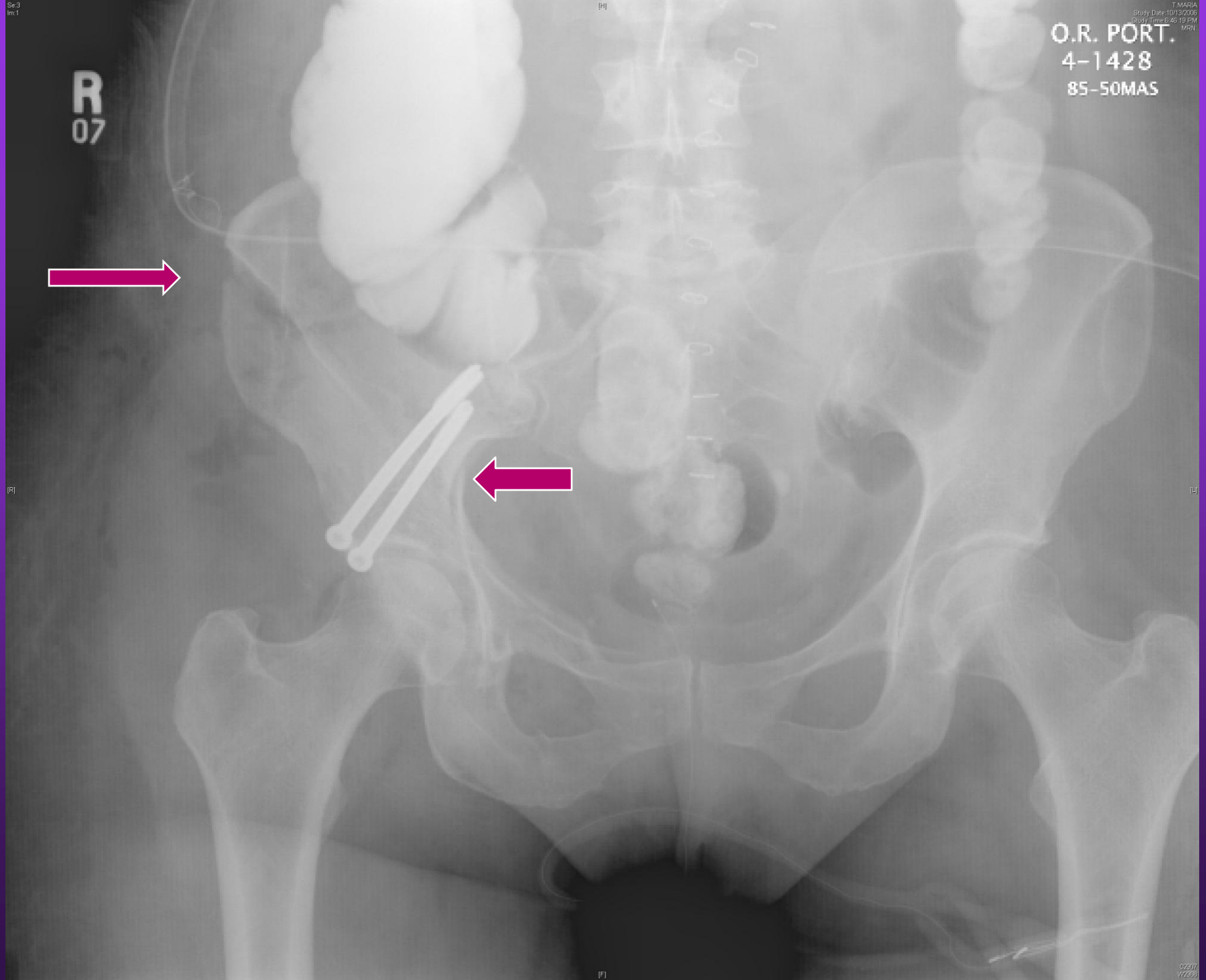
ArthroplastyVersus Open Reduction Internal Fixation for Posterior Wall Aetabular Fractures in Middle-aged Patients

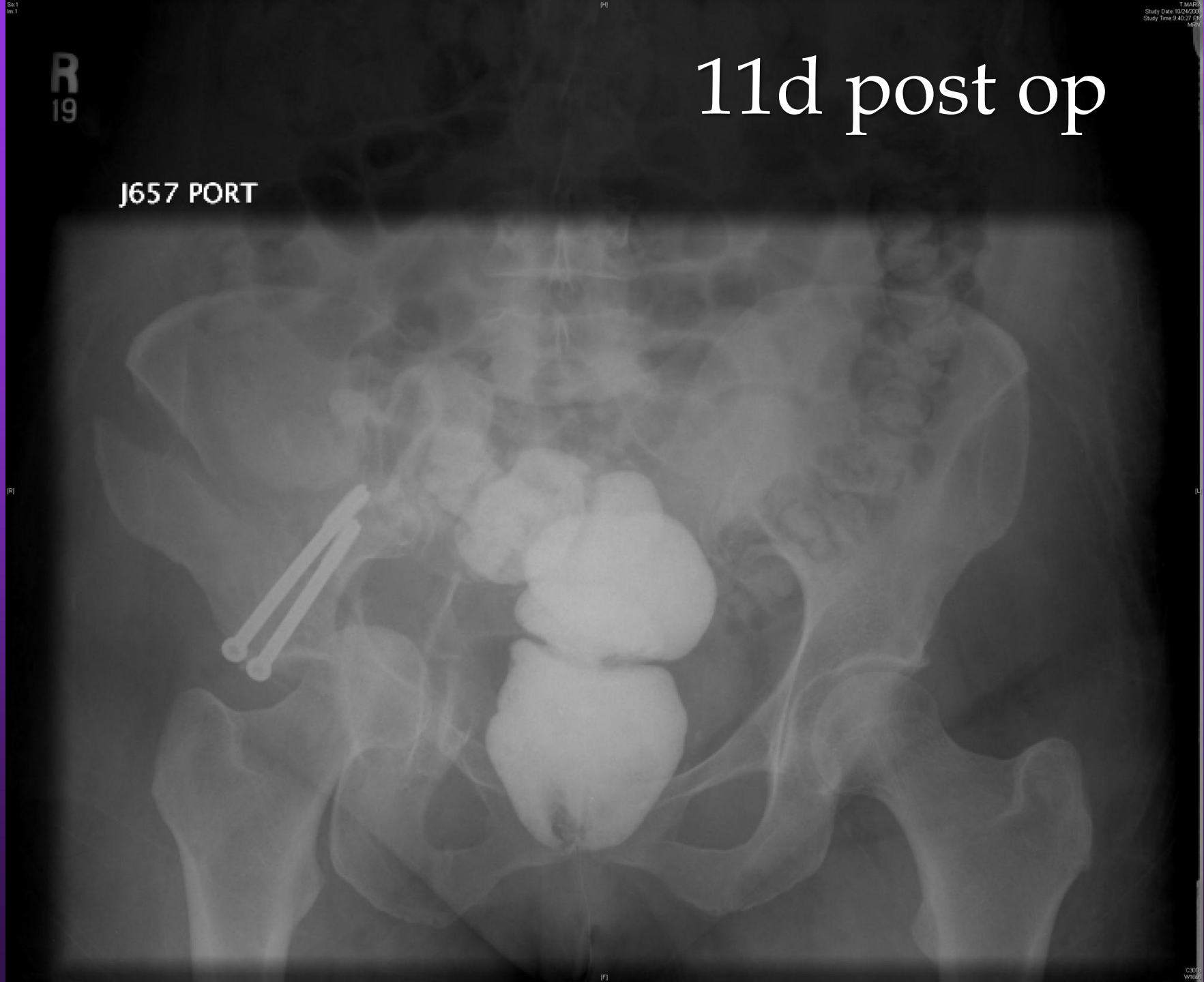
- Templeman et al, Feb JOT 2019


INJURY PREVENTION TEAM
Charity Hospital
PRIDE
TRAUMA TEAM

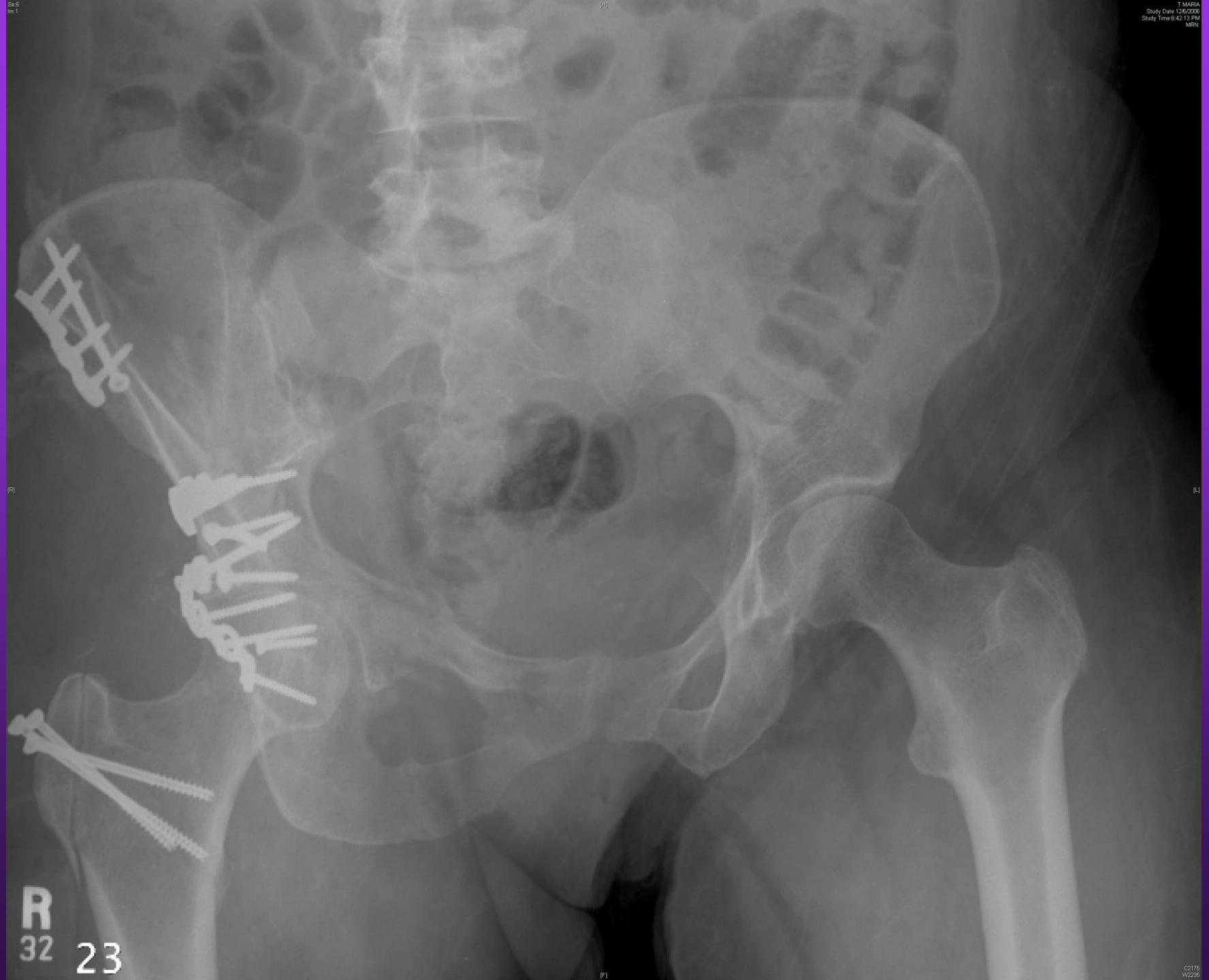

B ERNEST,M
Study Date:1/14/2009
Study Time:4:48:13 PM
MRN
ANUJ
TRAUMA 4
C2047
W4095

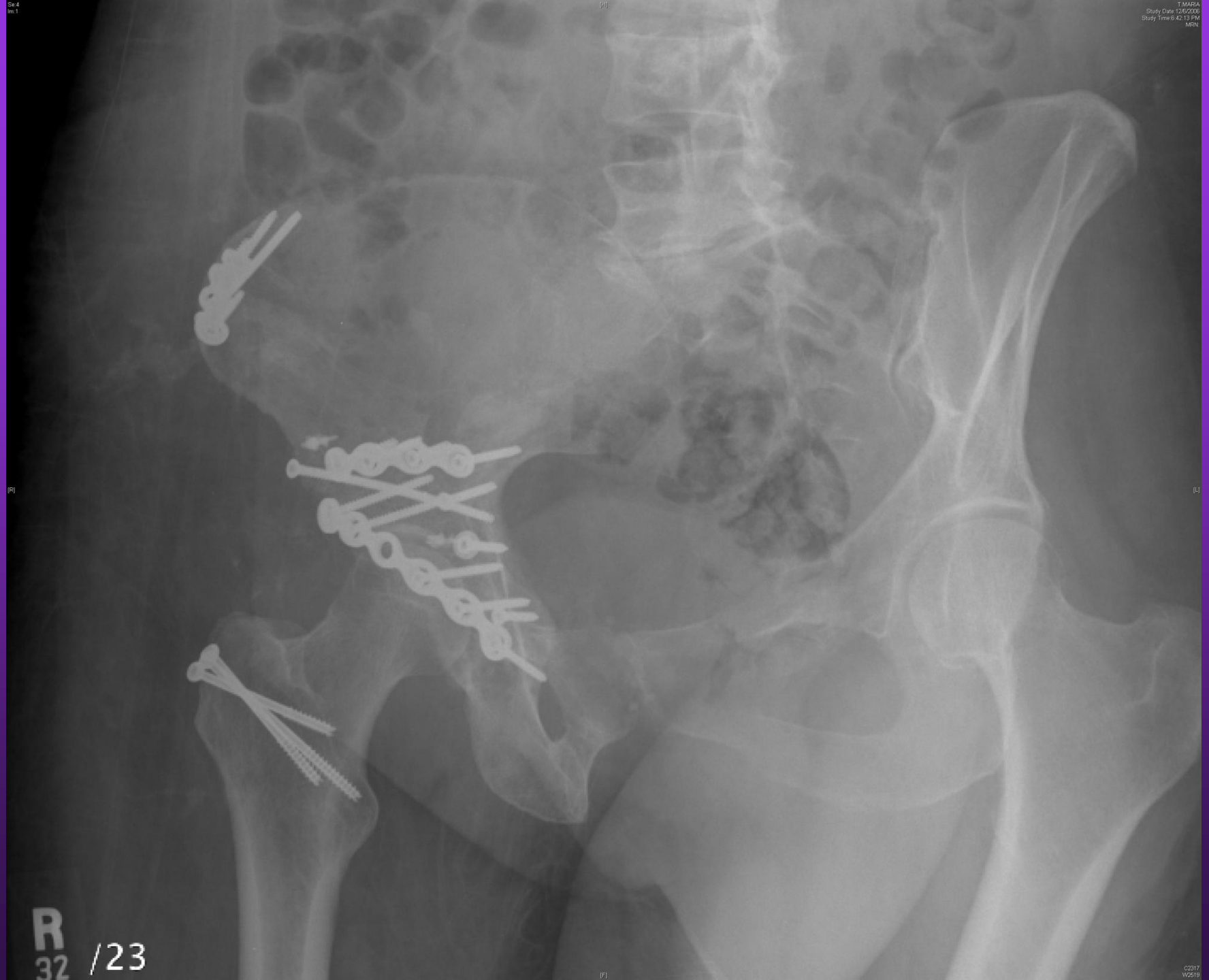
Make it pertfect

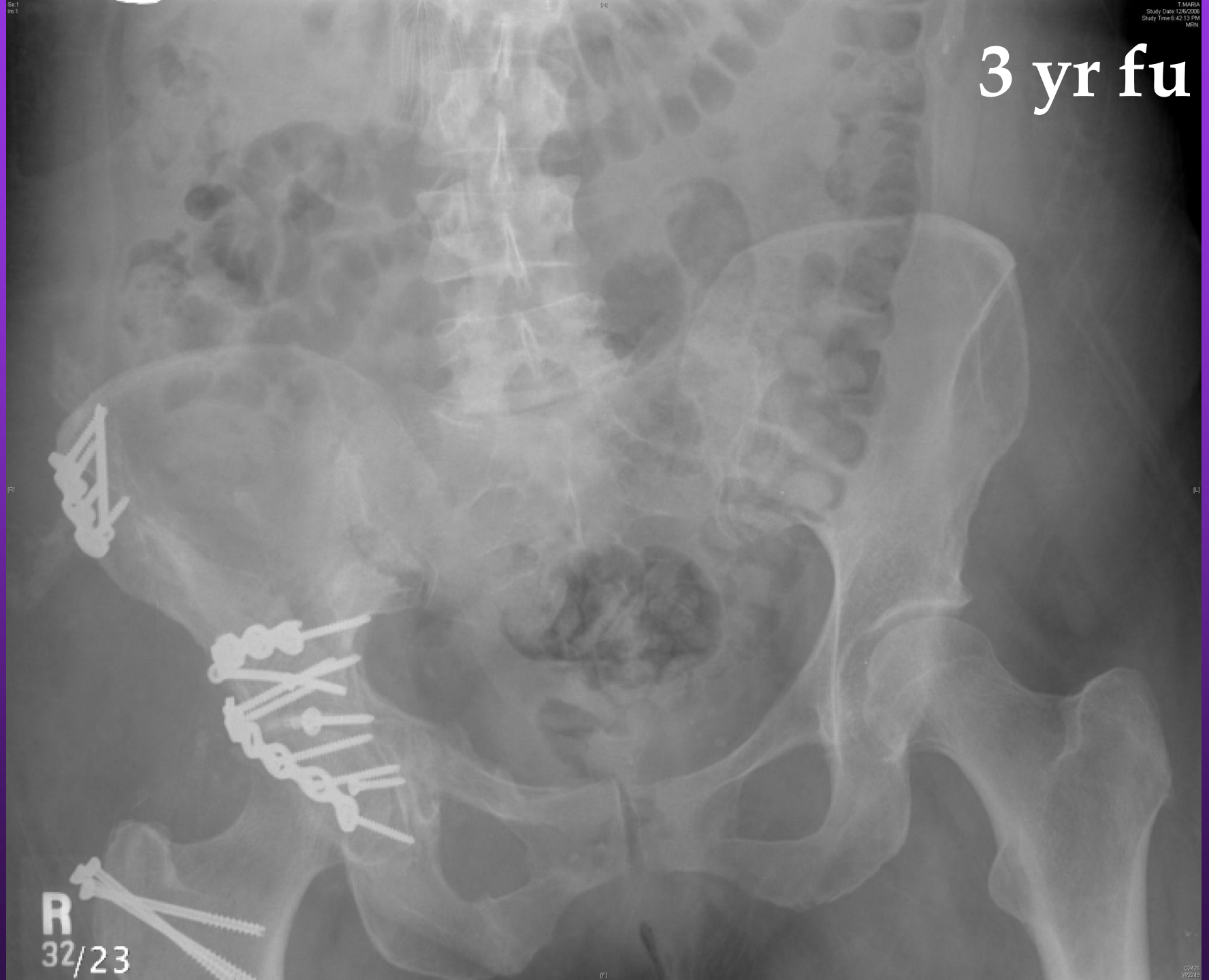

R
07
O.R. PORT.
4-1428
85-50MAS



11d post op


Se:5
Im:1
T.MARIA
Study Date:12/6/2006
Study Time:8:42:13 PM
MRN:
[R]
[L]
[F]
R
32
23
C2175
W2295


Se:4
Im:1
T MARIA
Study Date:12/6/2006
Study Time:8:42:13 PM
MRN:
[R]
[L]
[F]
R
32 /23
C2317
W2519


3 yr fu
R
32/23

Indications For ORIF

- Displaced dome > 1mm (ARA<25°, MRA<45°, PRA<70°), subluxation of femoral head
- Lack of 2º congruence (Both Column acetabular fractures only)
- 20-40% posterior wall

Contraindications

- Lack of know how (better is not good enough – needs to be perfect)
- Comorbidities (CV, non ambulators, etc)
- Non compliant (alzheimers, Schizo)
- Severe osteoporosis

Dislocated Hip

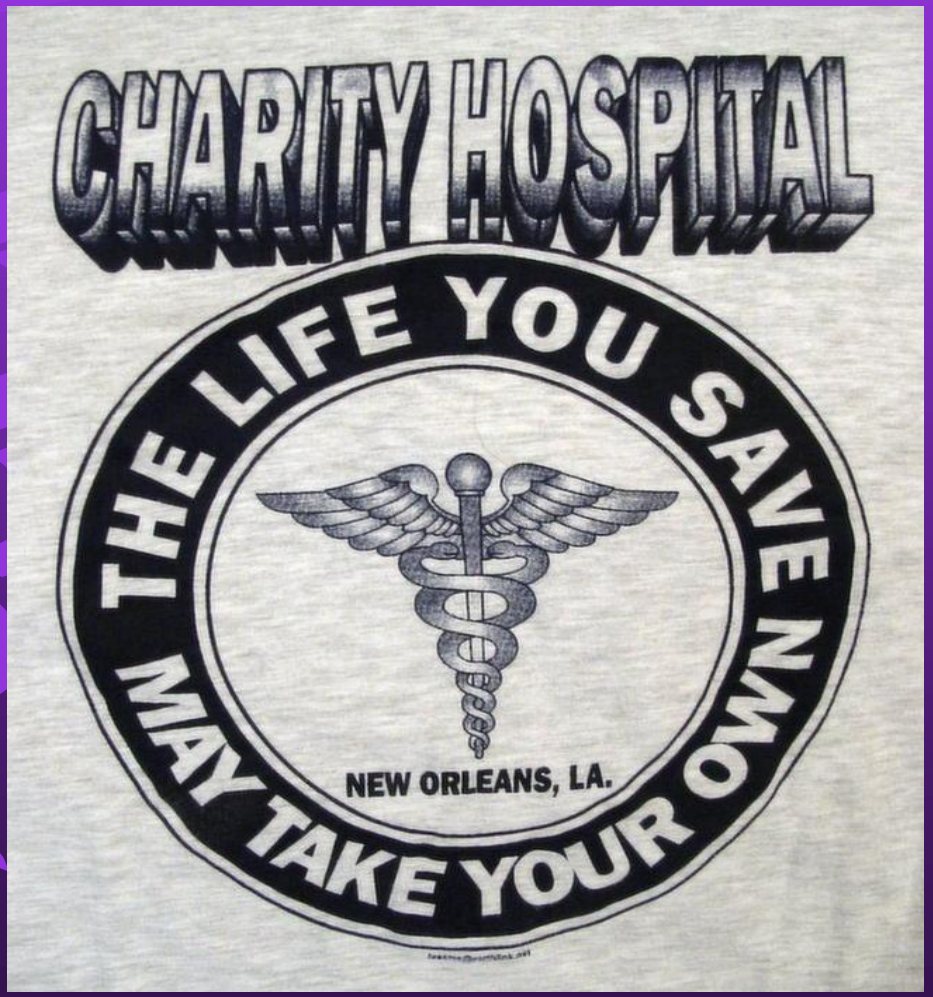
- Emergent reduction (6-12 hrs) general anesthesia preferred
- Central subluxation with Tr, BC, T-type or ACPHT-Distal femur skeletal traction

Emergency cont.

- Intrarticular fragments
- Associated femoral neck fracture

Thank You


Charity Hospital, New Orleans


CHARITY HOSPITAL
THE LIFE YOU SAVE MAY TAKE YOUR OWN
NEW ORLEANS, LA.