

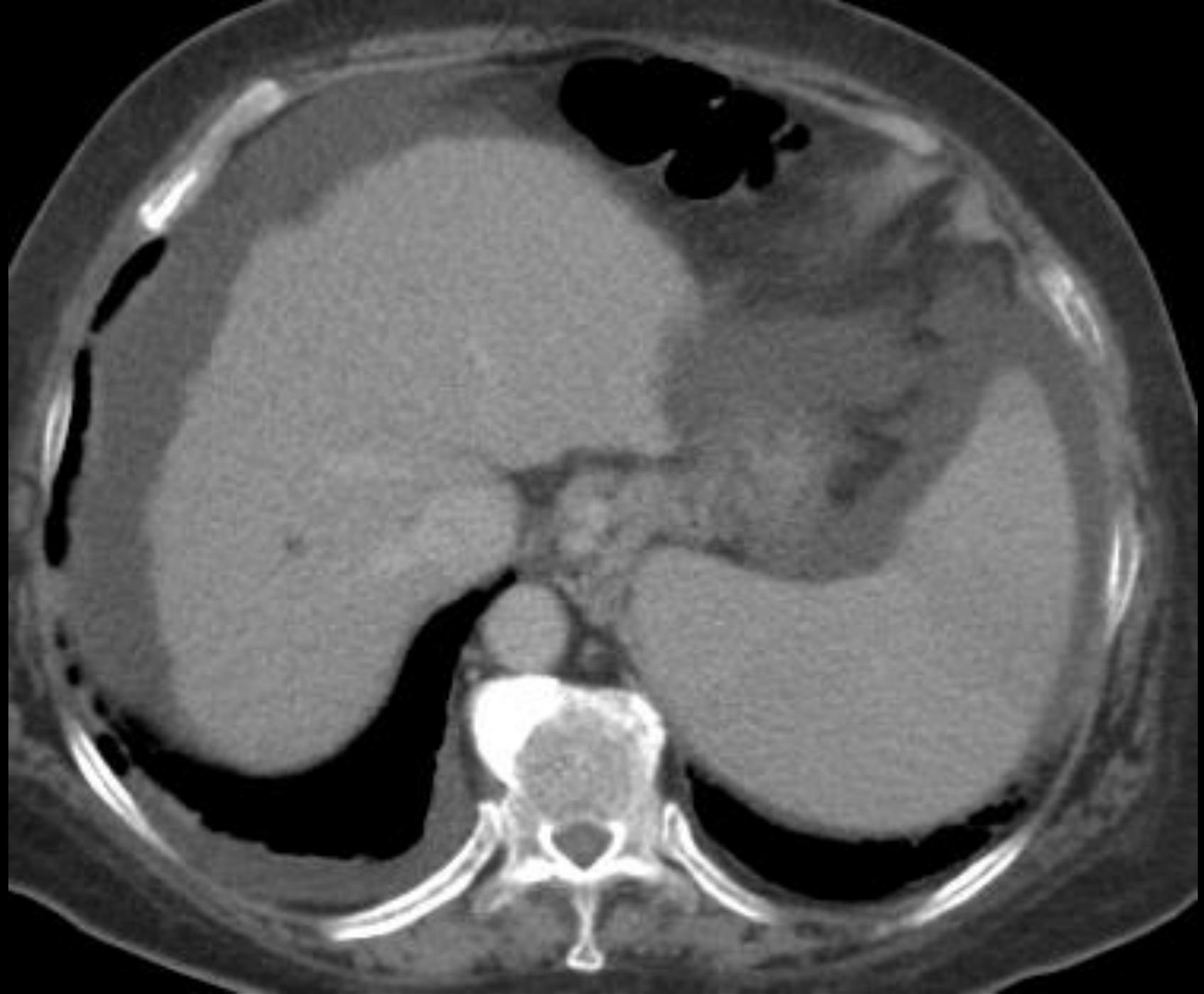
再ドレナージを用いた 腸腰筋膿瘍の一例

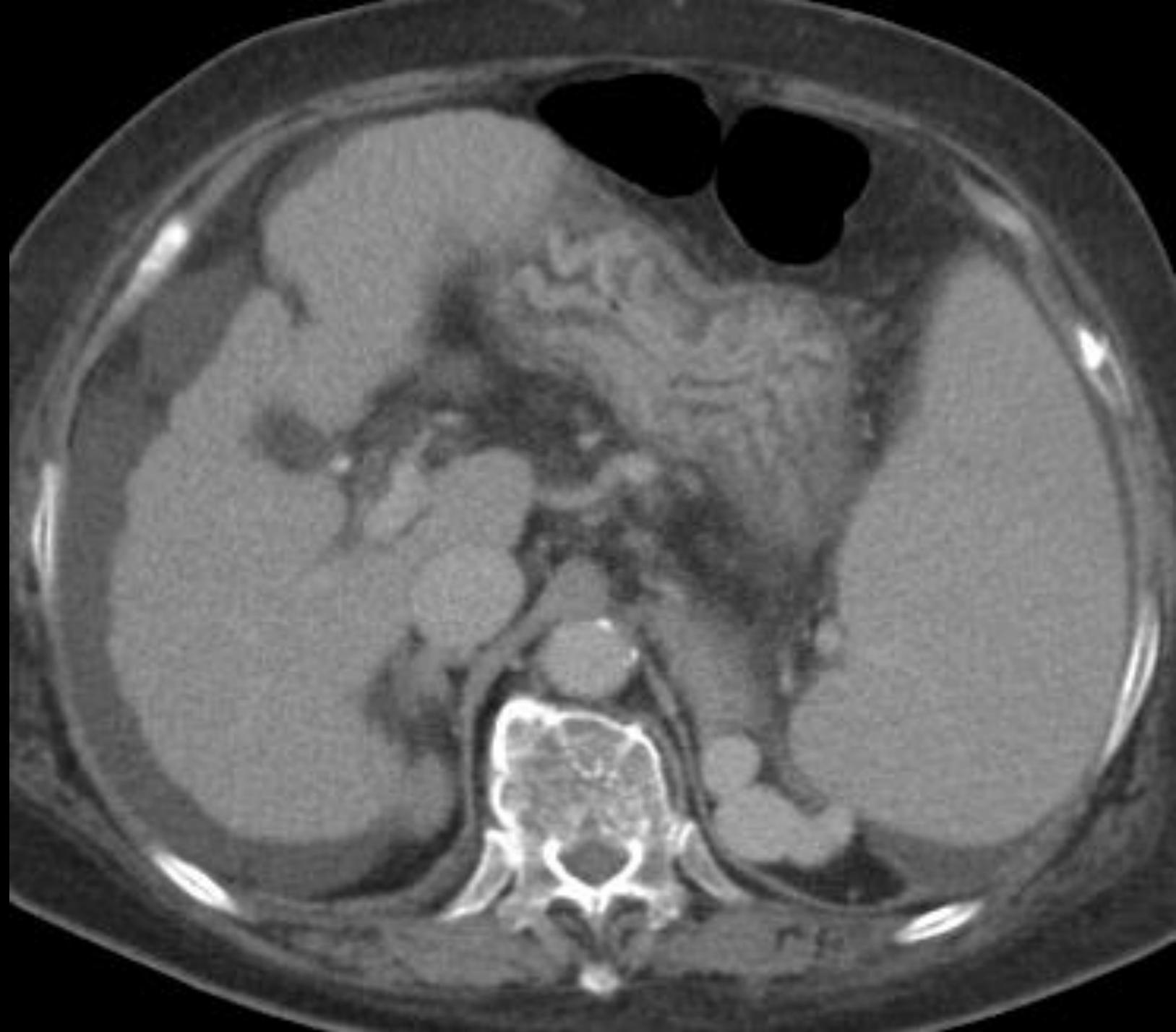
済生会宇都宮病院

加藤弘毅 谷村慶一 荒川和清 八神
俊明 笹沢俊吉 永島崇史 金子真也
本多正徳

70歳代 女性 既往：肝硬変

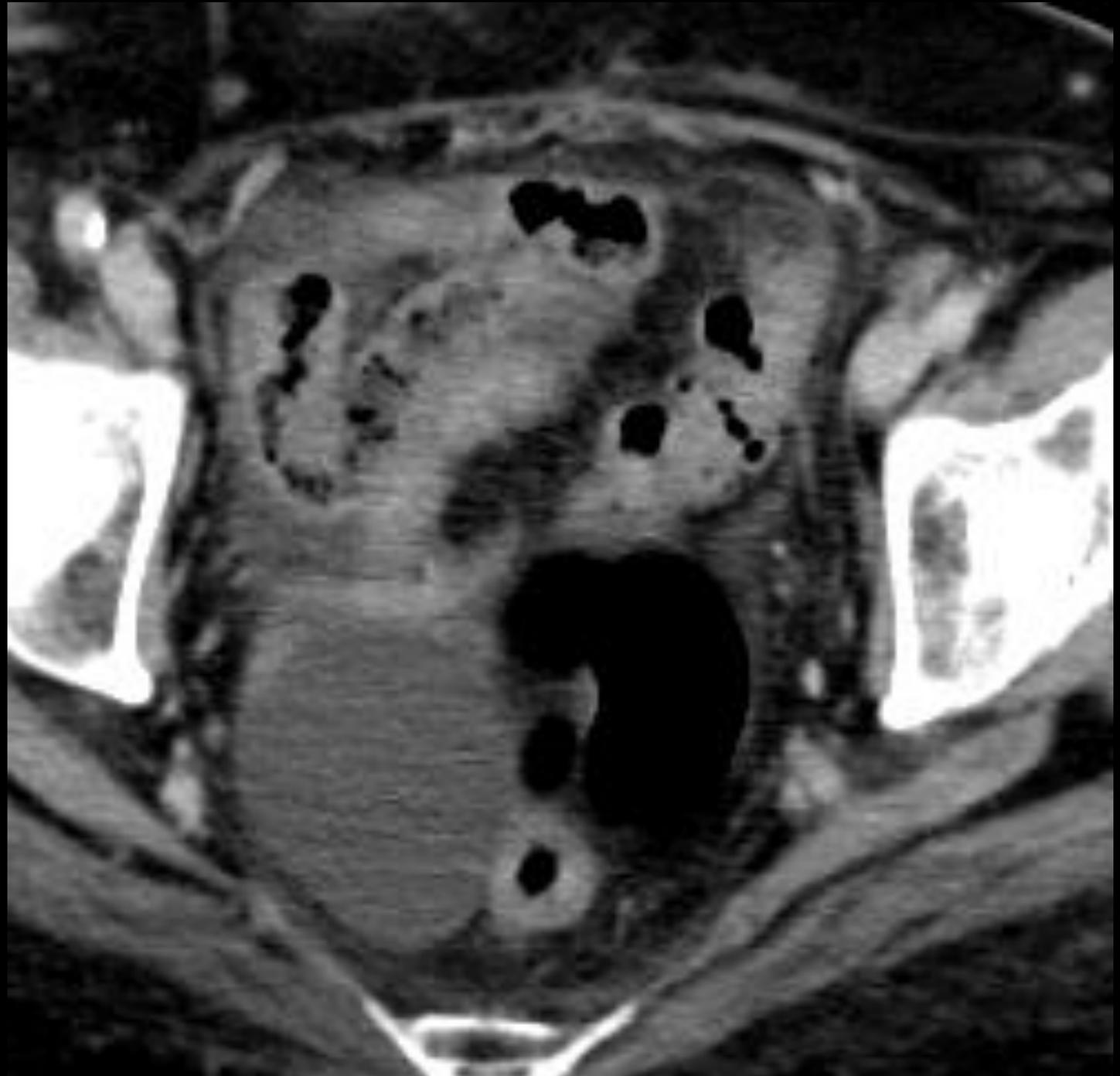
- 2日前から黒色便があり、消化管出血が疑われた。また1ヶ月以上前から腰痛増悪があり、両者の精査加療を行う方針となった。
- 消化管内視鏡検査では明らかな出血源を認めなかった。入院時に行ったCTで両側腸腰筋膿瘍が見られた。血液培養でStreptococcus salivariusを検出し、CEZ点滴開始した。
- MRI(7病日)で腰椎椎体椎間板炎も確認された。







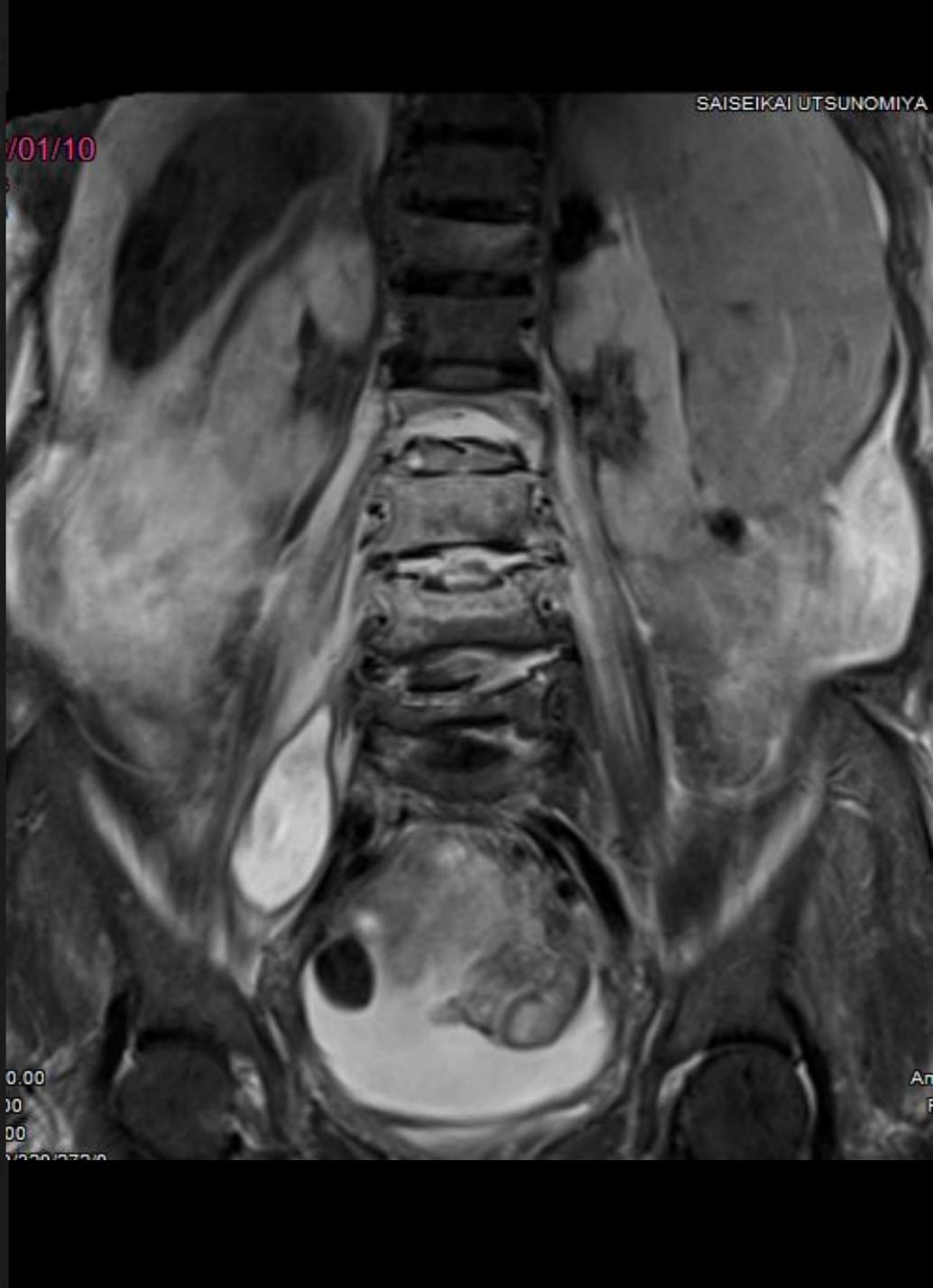
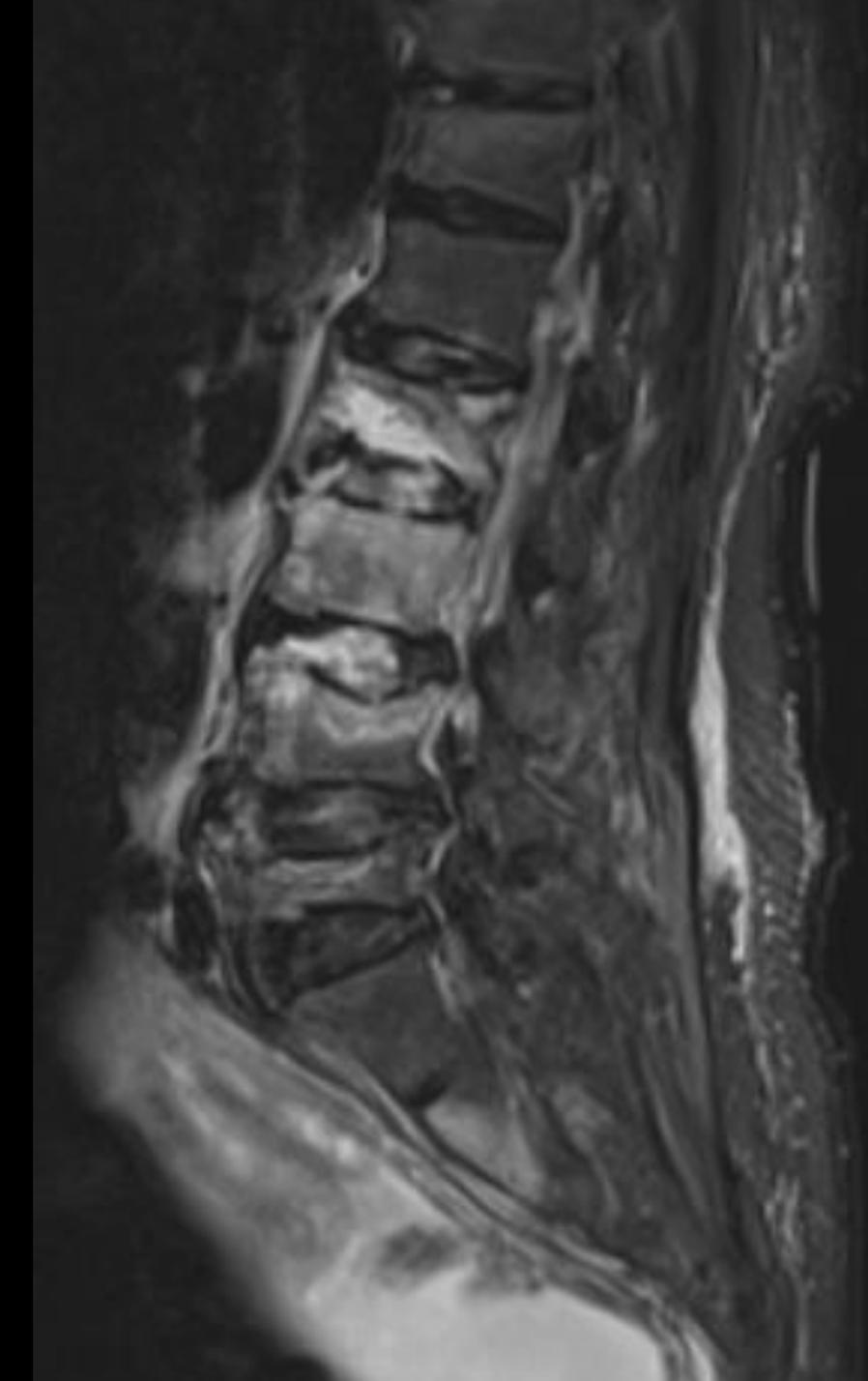




01/10

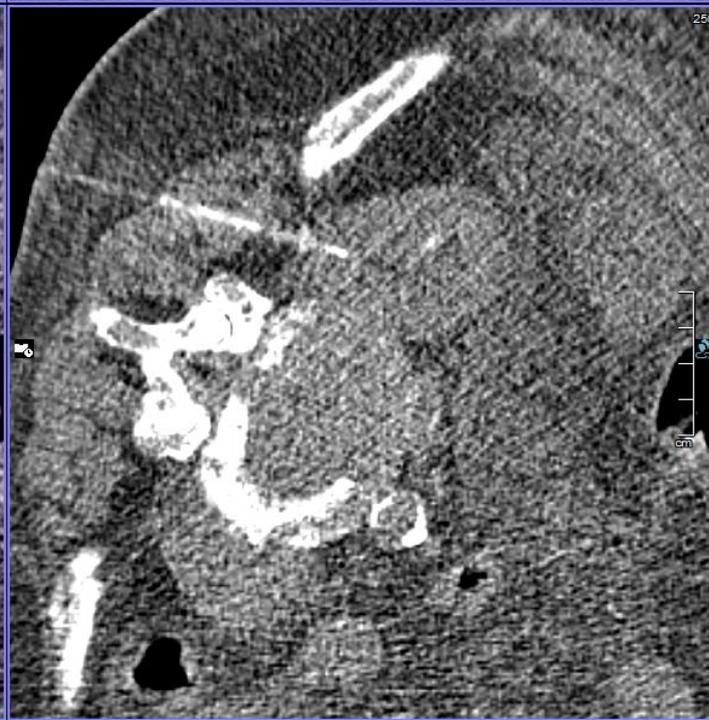
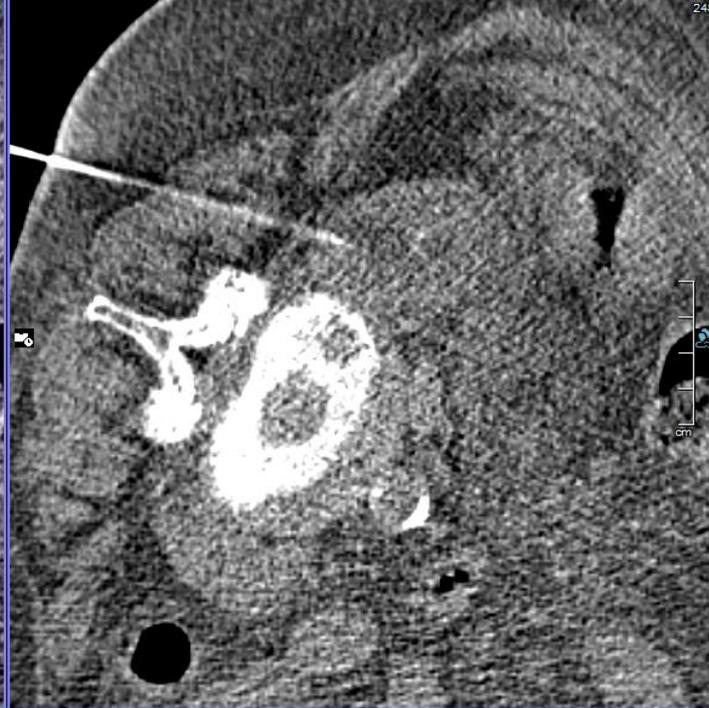
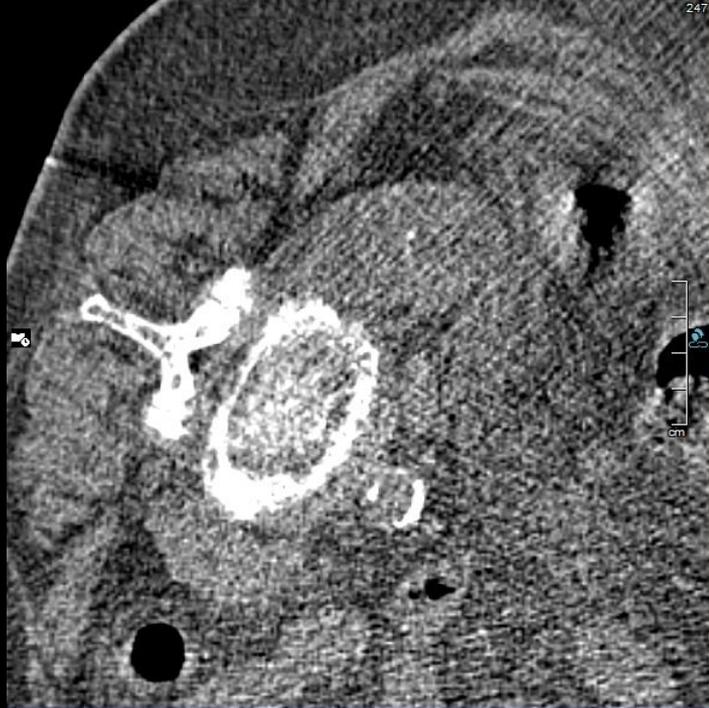
0.00
10
00
1/20/270.0

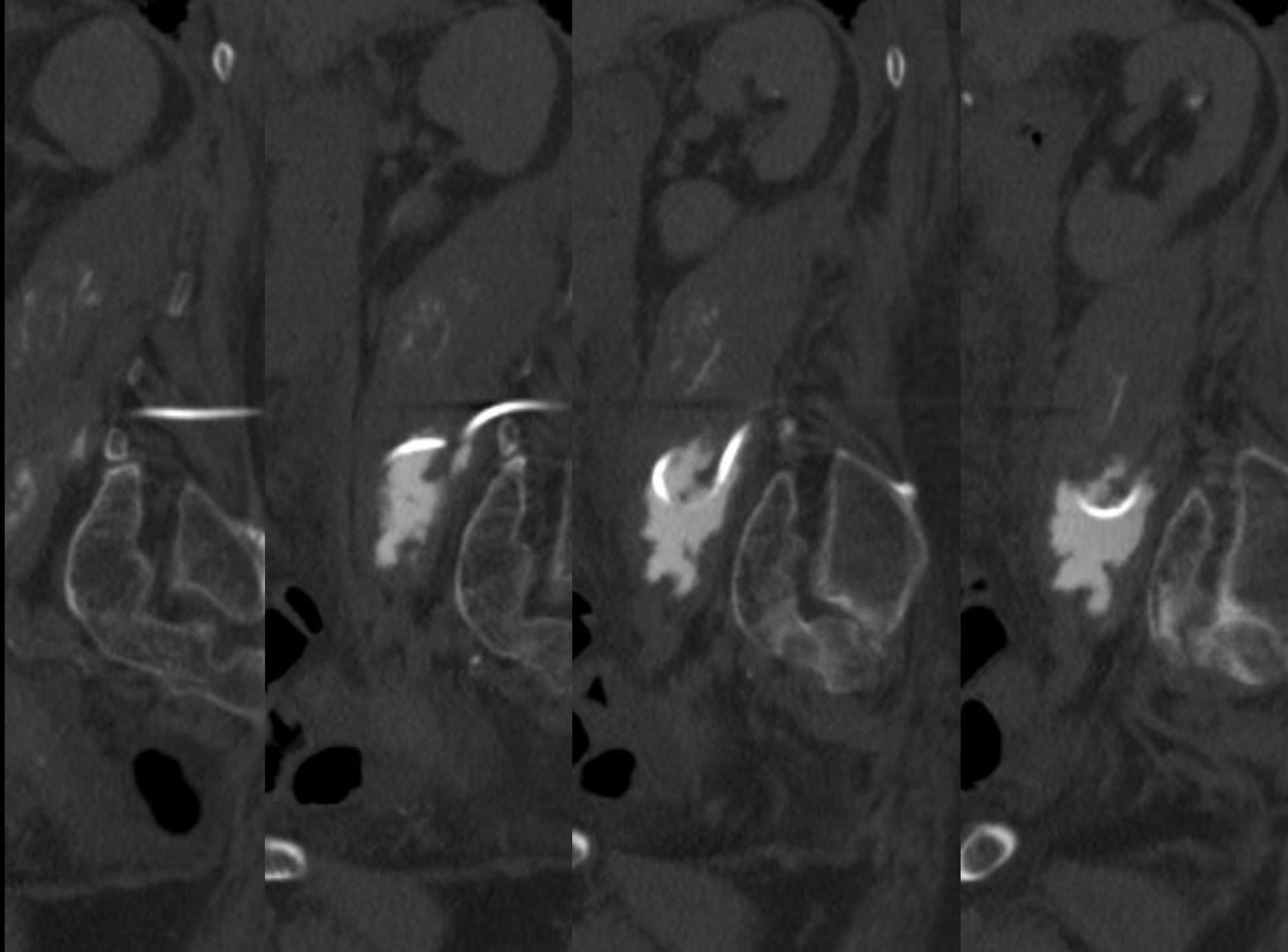
An
R



第9病日 CTガイド下ドレナージ

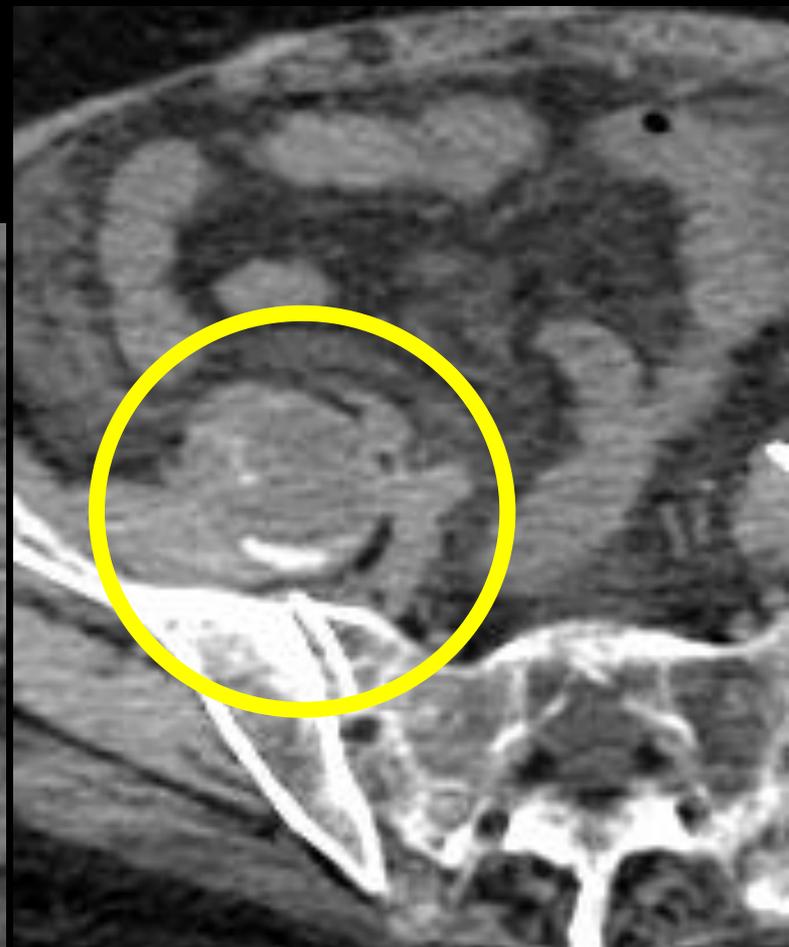
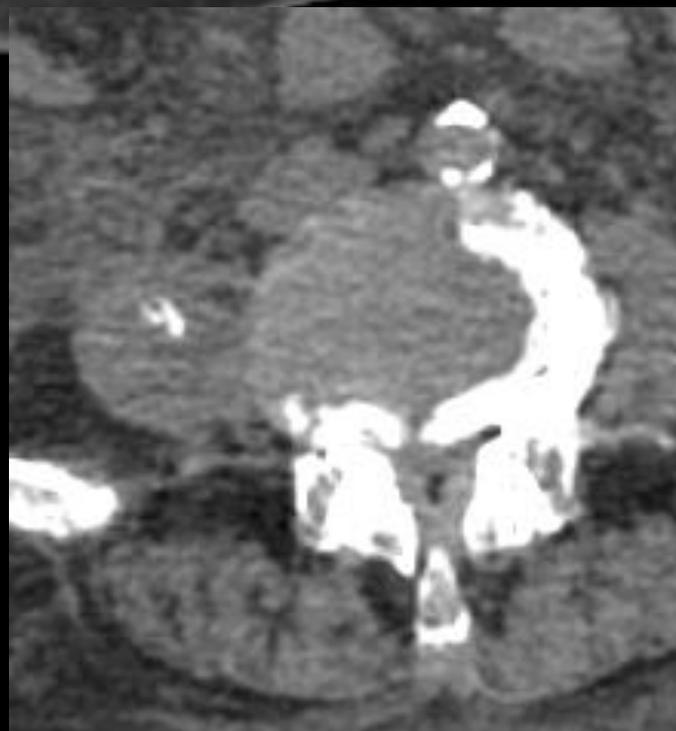




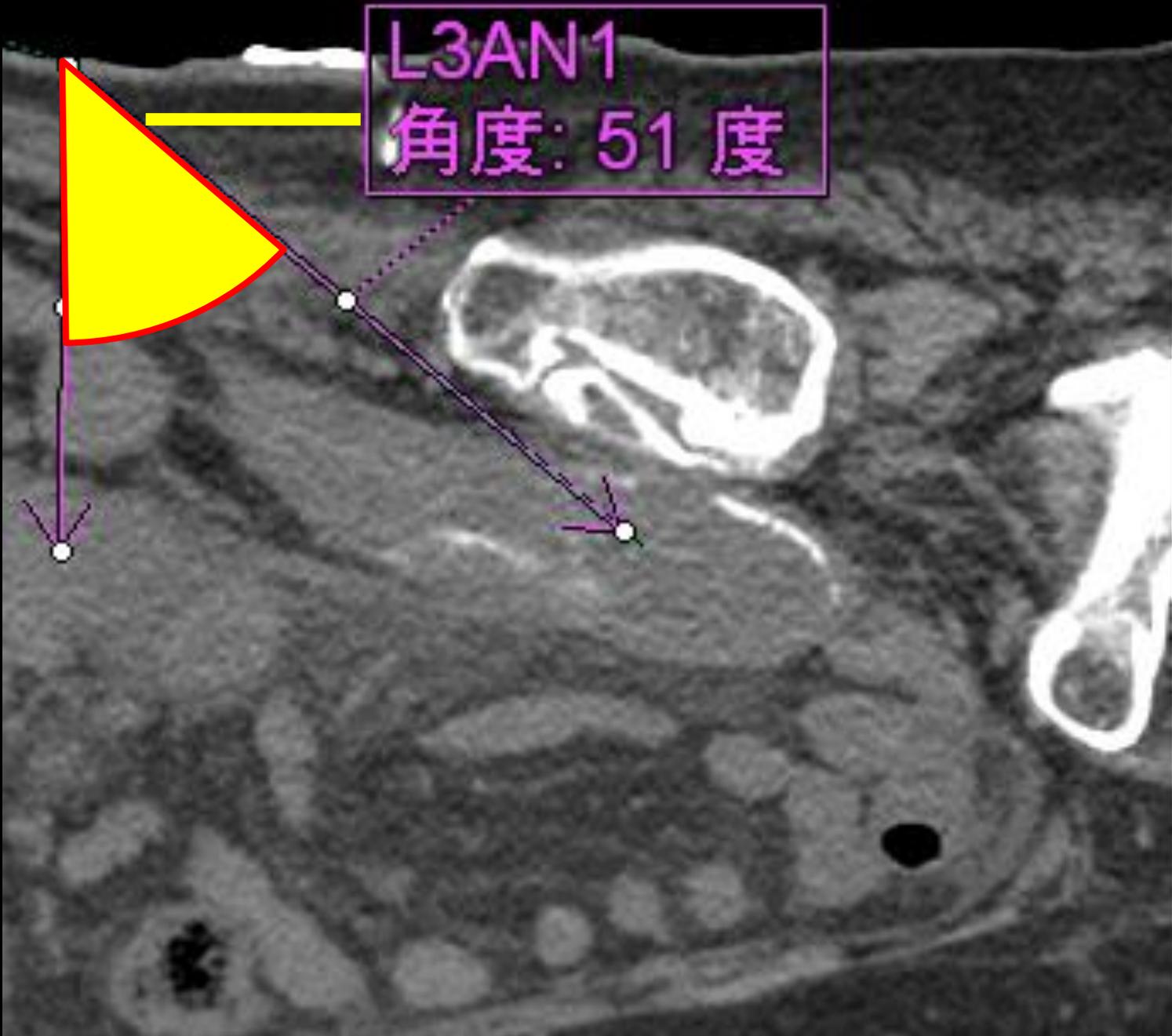


第23病日CT

ドレーンが膿瘍腔より逸脱
膿瘍は仙腸関節腹側残存



L3AN1
角度: 51 度



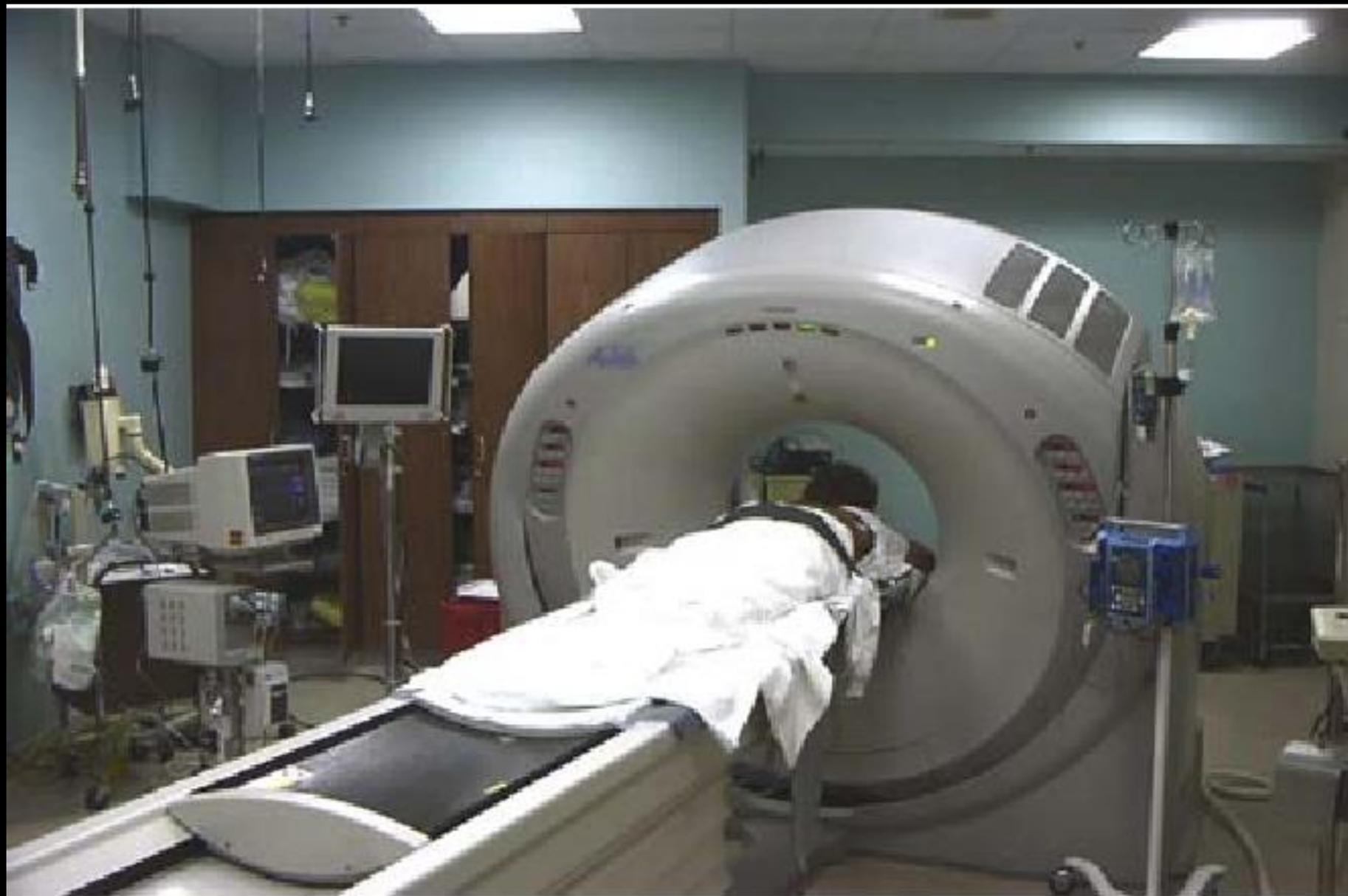
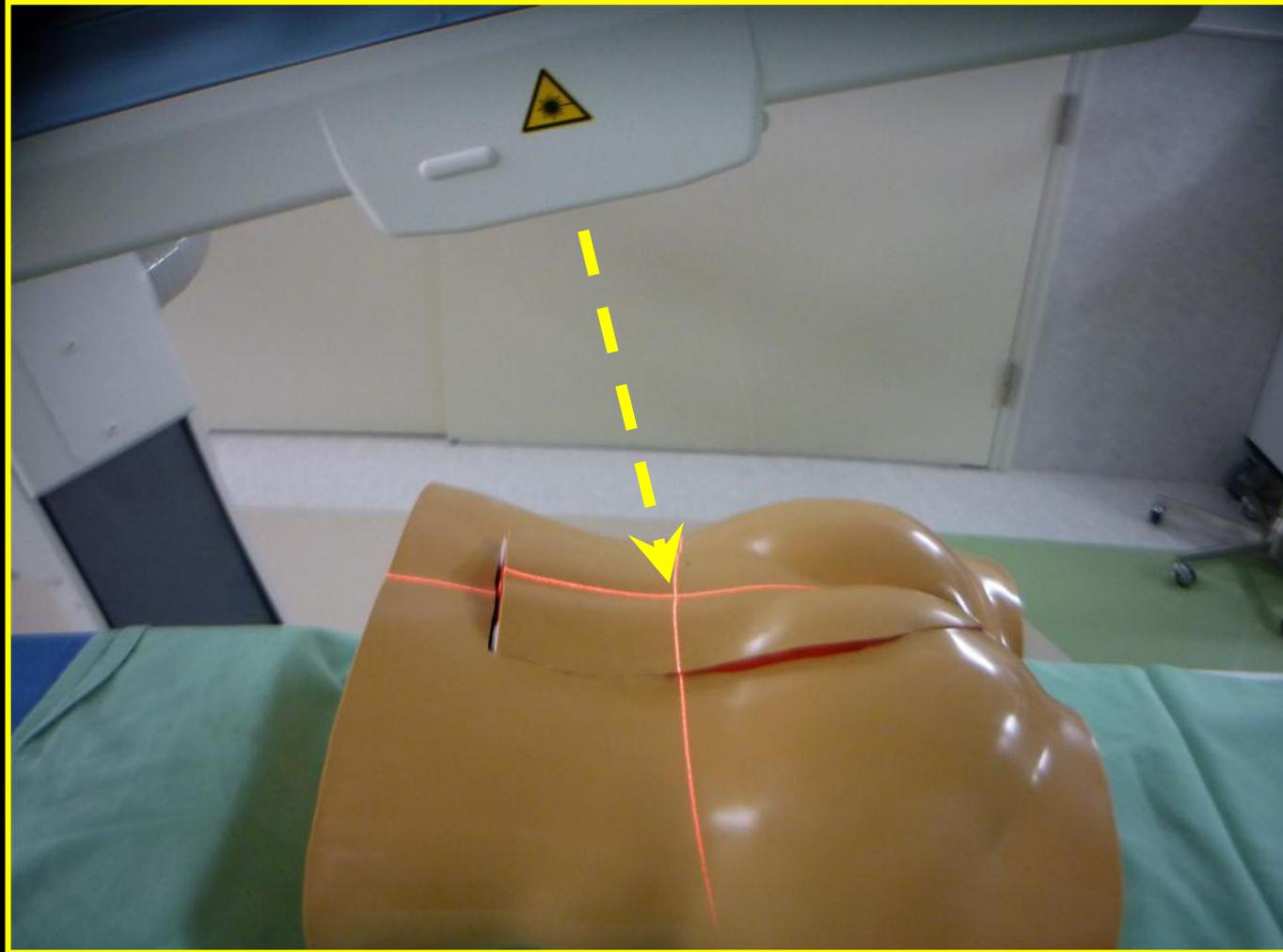


Fig. 4 Tilting the gantry gives “off-axis” CT fluoroscopy and allows

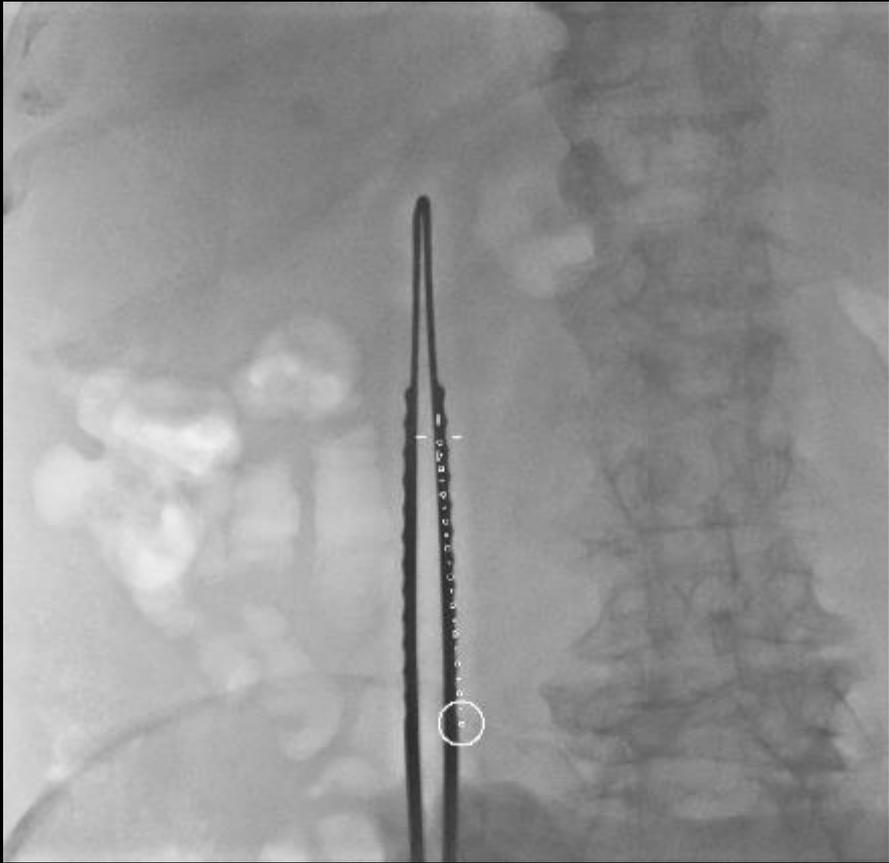
i Guide ドレナージ



i Guide ドレナージ



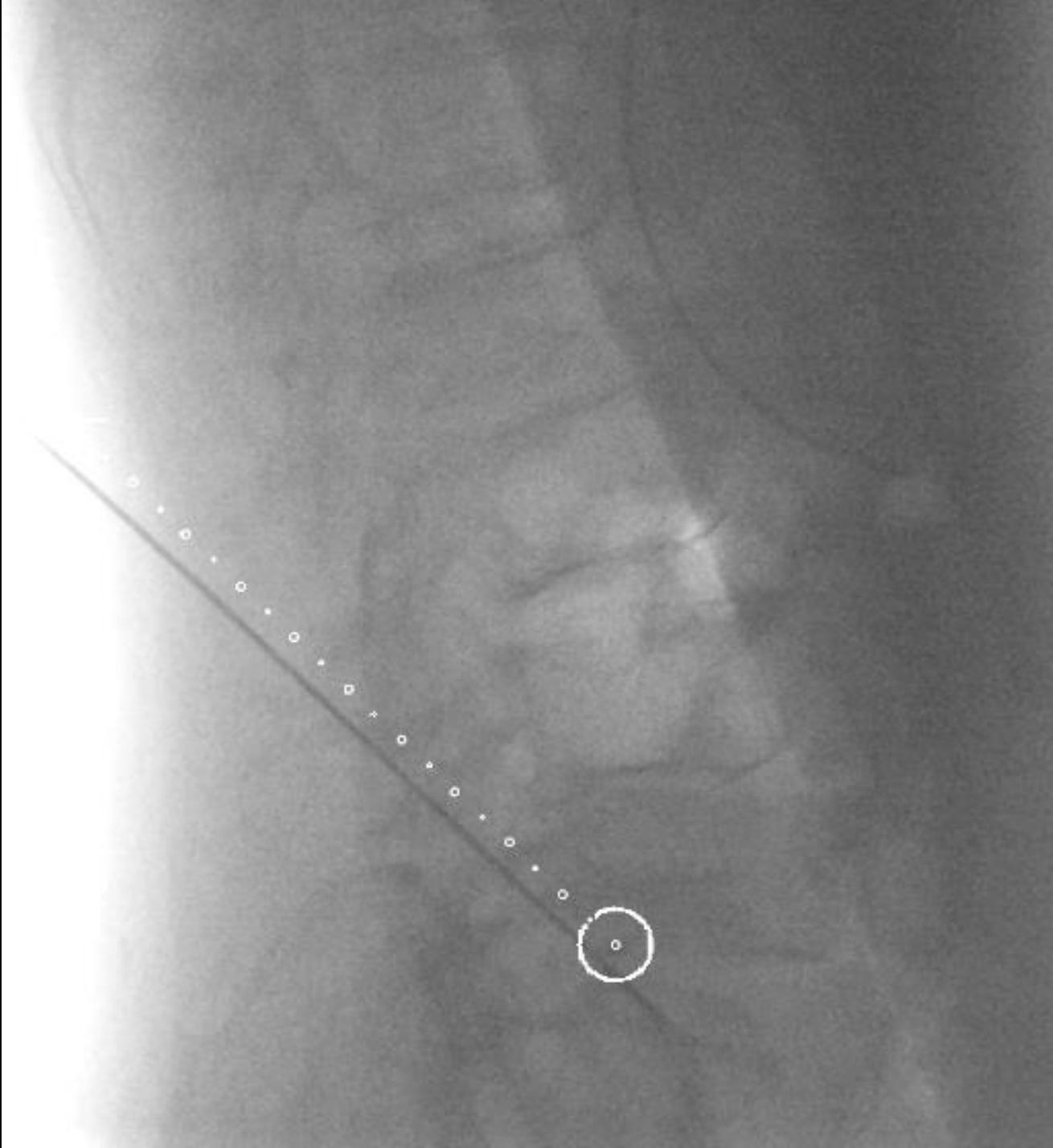


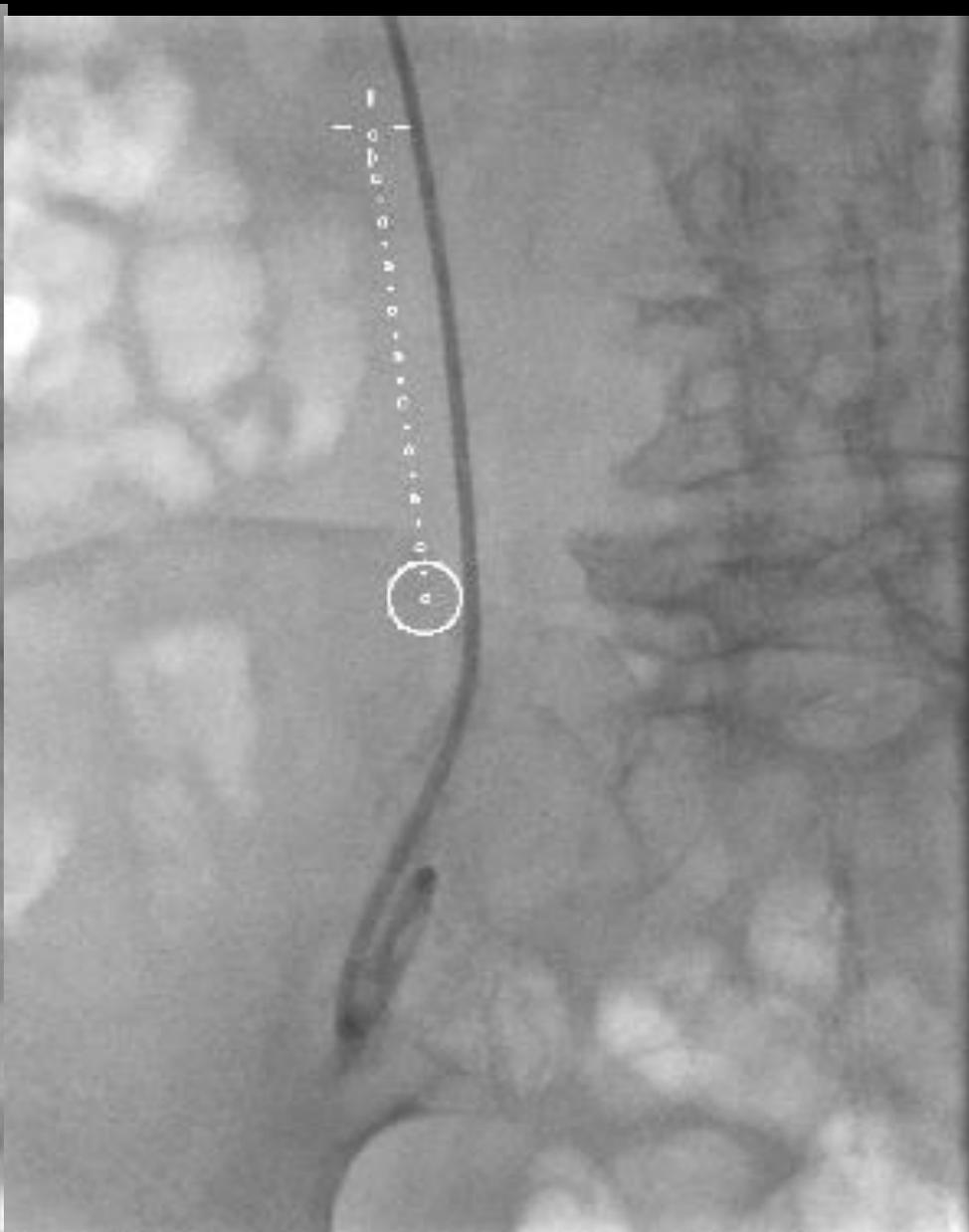
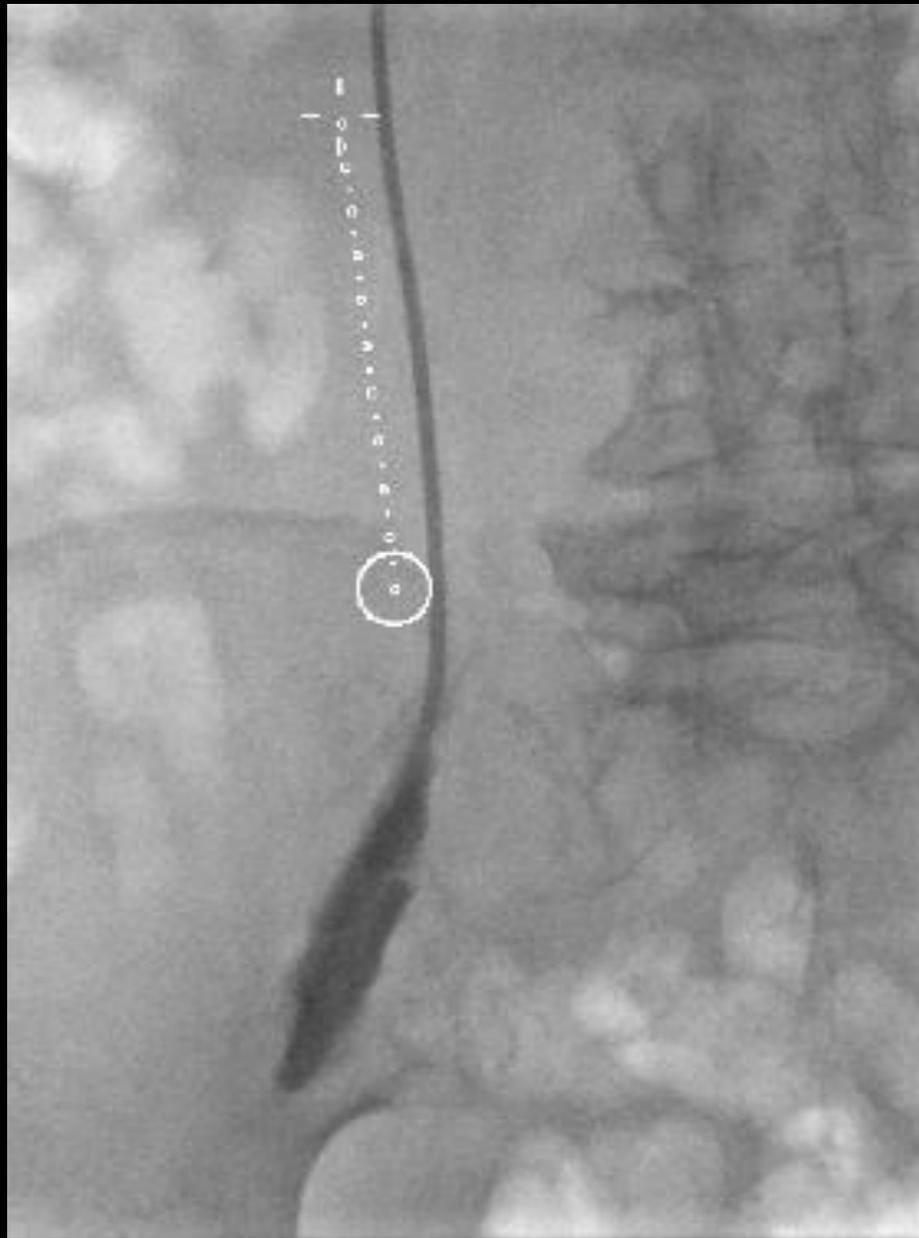












その後CTで膿瘍の縮小
リハビリテーションの継続のため
63病日に転院

i-Guideとは・・・

Dyna CTを利用してターゲットと穿刺部位を決定することにより、透視画面上にナビゲーション用のラインが表示される。

穿刺部位とターゲットの決定

Patient Applications InSpace Show Mode View Orientation Tools Measure Volumes Options Help

10.10.06-23:31:54-STD RES/MPR 3mm
 10.10.06-23:31:54-STD-160319 190... LAO/RAO 90
 iGuide_SoftTissue Nat Fill HU Norm... CRAN/CAUD 0
 Saiseikai Utsunomiya Hospital
 AXIOM-Artis
 2010-10-06
 23:53:25
 AX

W 568
C -744

10.10.06-23:31:54-STD RES/MPR 3mm
 10.10.06-23:31:54-STD-160319 190... LAO/RAO 0
 iGuide_SoftTissue Nat Fill HU Norm... CRAN/CAUD 0
 Saiseikai Utsunomiya Hospital
 AXIOM-Artis
 2010-10-06
 23:53:25
 AX

W 568
C -744

10.10.06-23:31:54-STD RES/MPR 3mm
 10.10.06-23:31:54-STD-160319 190... LAO/RAO 0
 iGuide_SoftTissue Nat Fill HU Norm... CRAN/CAUD -90
 Saiseikai Utsunomiya Hospital
 AXIOM-Artis
 2010-10-06
 23:53:25
 AX

W 568
C -744

10.10.06-23:31:54-STD RES
 10.10.06-23:31:54-STD-160319 190... LAO/RAO 3
 iGuide_SoftTissue Nat Fill HU Norm... CRAN/CAUD 19
 Saiseikai Utsunomiya Hospital
 AXIOM-Artis
 2010-10-06
 23:53:25
 AX

B 50 W 983
O 50 C 74

Viewing
Filming
3D
InSpace

Type **Orient** **Table** **2D**

Brightness 50
 Opacity 50

MPR **Tools** **Measure** **X-Ray**

Notice: slice thickness should not be used to make measurements.
 Thick MPR
 MPR thickness (mm) 3

2010-10-07 00:04:07

穿刺部位とターゲットの決定

Software interface for iGuide Needle Guidance, showing four CT scan views and a control panel.

Top Menu: Patient Applications InSpace Show Mode View Orientation Tools Measure Volumes Options Help

Top Left View (Sagittal): I-Guide 0000001 1974-05-18 M RES/MPR 3mm LAO/RAO 84 CRAN/CAUD 0. Target distance: 10.22 cm.

Top Right View (Axial): I-Guide 0000001 1974-05-18 M RES/MPR 3mm LAO/RAO -6 CRAN/CAUD 0. Target distance: 10.22 cm.

Bottom Left View (Axial): I-Guide 0000001 1974-05-18 M RES/MPR 3mm LAO/RAO 0 CRAN/CAUD -90. Target distance: 17.24 cm.

Bottom Right View (Coronal): I-Guide 0000001 1974-05-18 M RES/MPR 3mm LAO/RAO -6 CRAN/CAUD 0. Target distance: 10.22 cm.

Right Panel: Viewing, Filming, 3D. Includes a grid of icons for navigation and a brightness slider set to 50.

iGuide Needle Guidance Dialog:

- Step 1: Define Path. Please define path by selecting target and entry point with single mouse click.
- Step 2: Check Views.
- Step 3: Progress Needle.
- Buttons: Close, Suspend, Help.

Status Bar: Deleted successfully job for TASHIRO AKIKO for Artis_zeego 2010-09-08 16:36:52

3D表示での確認

Patient Applications InSpace Show Mode View Orientation Tools Measure Volumes Options Help

Top Left View (Progression View 1)

I-Guide 0000001 1974-05-18 M
iGuide_SoftTissue Nat Fill HU Norm...
Saiseikai Utsunomiya Hospital
AXIOM-Artis
2010-09-08
16:38:38
AX

RES LAO/RAO 84 CRAN/CAUD 0

10.82 cm

Progr. View 1

B 50 W 962
O 50 C 74

Top Right View (Progression View 2)

I-Guide 0000001 1974-05-18 M
iGuide_SoftTissue Nat Fill HU Norm...
Saiseikai Utsunomiya Hospital
AXIOM-Artis
2010-09-08
16:38:38
AX

RES LAO/RAO -6 CRAN/CAUD 0

10.82 cm

Progr. View 2

B 50 W 901
O 50 C -30

Bottom Left View (Bull's Eye View)

I-Guide 0000001 1974-05-18 M
iGuide_SoftTissue Nat Fill HU Norm...
Saiseikai Utsunomiya Hospital
AXIOM-Artis
2010-09-08
16:38:38
AX

RES LAO/RAO -6 CRAN/CAUD 30

10.82 cm

Progr. View 2

B 50 W 901
O 50 C -30

Parameters Panel

Path:

Direction: LAO/RAO -6° CRAN/CAUD 0°
Length: 10.82 cm

Views:

Bull's Eye View: LAO/RAO -6° CRAN/CAUD 0°
Progression View 1: LAO/RAO 84° CRAN/CAUD 0°
Progression View 2: LAO/RAO -6° CRAN/CAUD 30°

Angles:

<-> Progression View 1 / Bull's Eye View: 90°
<-> Progression View 2 / Bull's Eye View: 30°
<-> Progression View 1 / Progression View 2: 90°

Control Panel

Viewing: [Navigation icons]

Filming: [Type Orient Table 2D icons]

Brightness: 50

iGuide Needle Guidance

Step 1: Define Path

Step 2: Check Views

Please check Progression Views. They can be adjusted by rotating the volume in the upper left and lower left VRT view.

Step 3: Progress Needle

Close Suspend Help

Deleted successfully job for TASHIRO AKIKO for Artis_zeego 2010-09-08 16:38:21

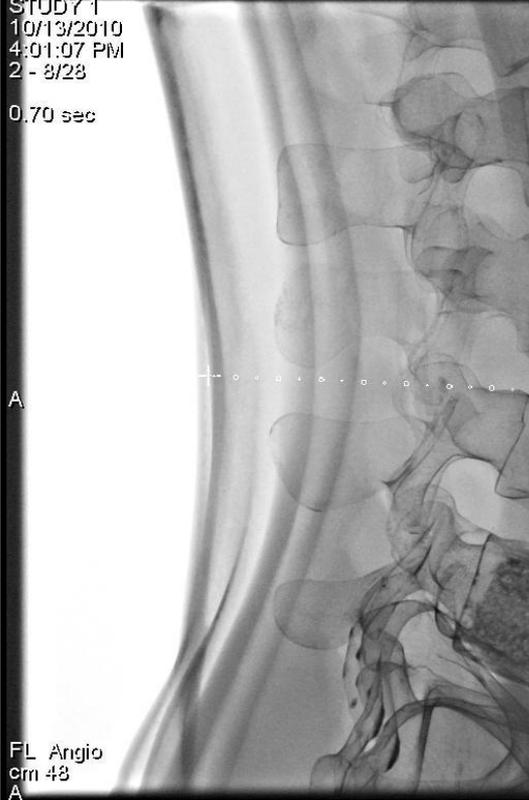
Patient Applications Transfer Edit View Image Options Help

10.10.13-15:48:15-STD
10.10.13-15:48:15-STD-160319

* 1/1/1900
O

STUDY 1
10/13/2010
4:01:07 PM
2 - 3/23

0.70 sec



FL Angio
cm 43
A
KV 62
mA 20
D 44
LAO 90° / 0°

iGuide refers to current C-arm geometry

Stopping

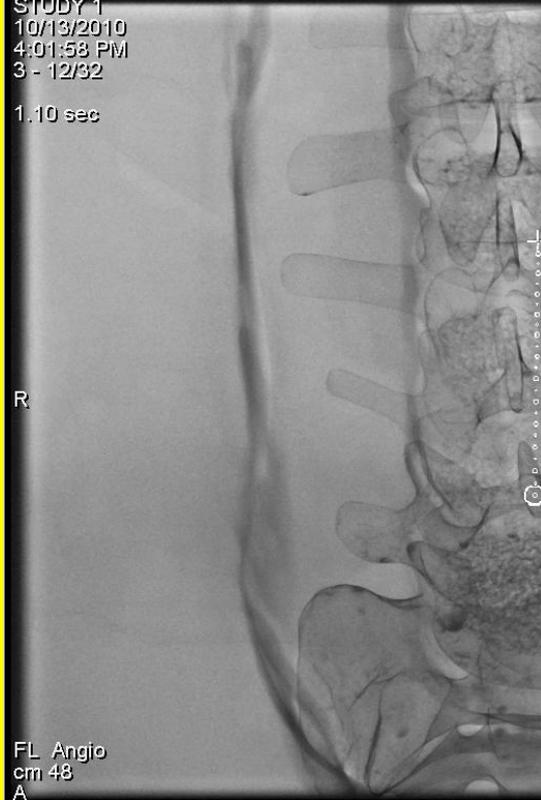
Patient Applications Transfer Edit View Image Options Help

10.10.13-15:48:15-STD
10.10.13-15:48:15-STD-160319

* 1/1/1900
O

STUDY 1
10/13/2010
4:01:53 PM
3 - 12/32

1.10 sec



FL Angio
cm 43
A
KV 62
mA 21
D 44
0° / CAUD 30°

iGuide refers to current C-arm geometry

Saiseikai Utsunomiya Hospital
AXIOM-Artis
VC14E 091208
HFS
R////E//

10.10.13-15:48:...

Store Monitor [Dropdown] [Grid Icon]

- + [Grid Icon]

Store Monitor STOP

Progress Bar

Play Stop Pause

View	Image	DSA
[Window Icon]	[Grid Icon]	[Grid Icon]
[Head Icon]	[Sun Icon]	[Head Icon]
[Hand Icon]	[Head Icon]	[Head Icon]

Adjust	Calib.	Tools
2047	[Sun Icon]	[Sun Icon]
4095	auto	[Sun Icon]

[Navigation Icons]

[SM Icon]

[Navigation Icons]

1240 x 960

EE 7%
DDO 45%

WC 1595 [C 2047]
WW 2400 [W 4095]

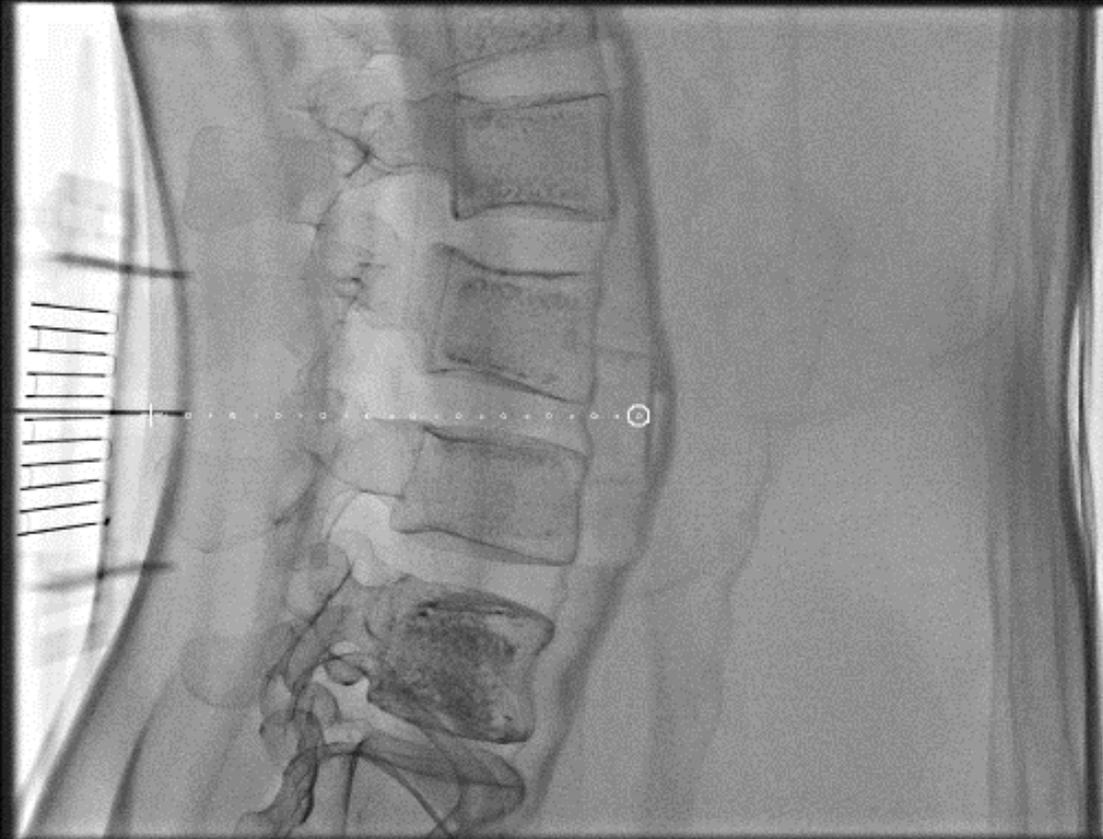
Viewing

Filming

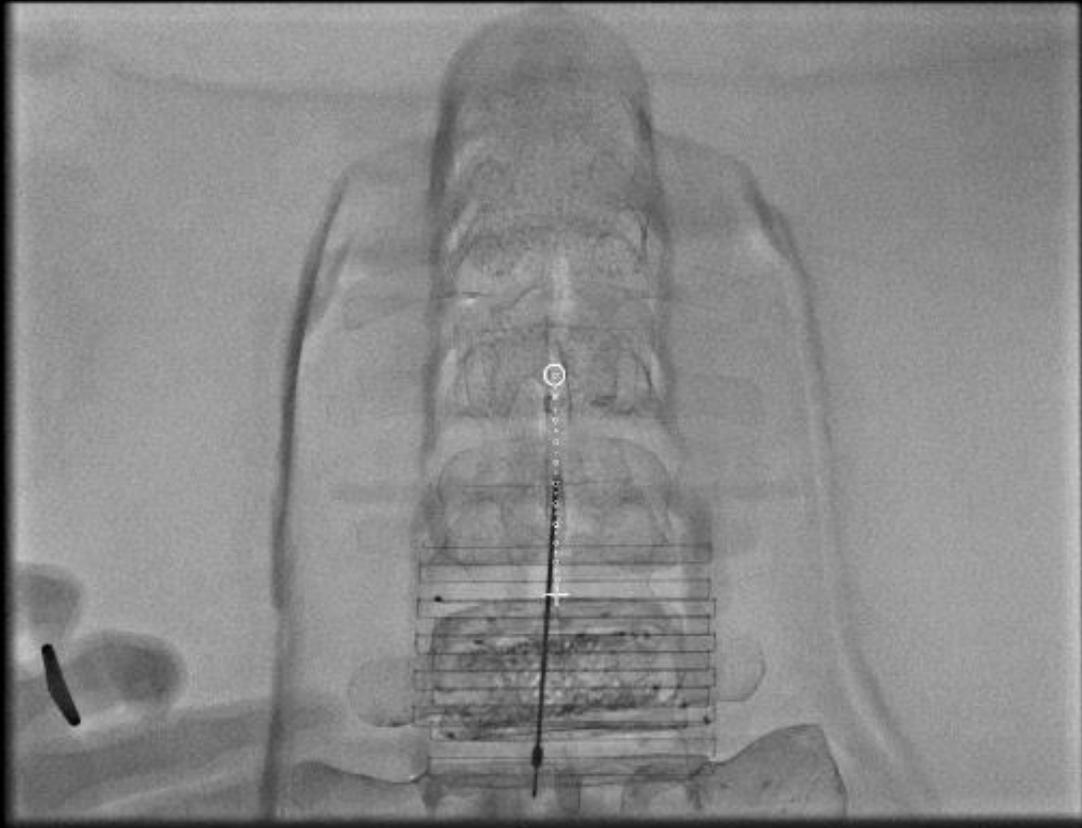
3D

InSpace

Angio



iGuide refers to current C-arm geometry



iGuide refers to current C-arm geometry

- 穿刺部位とターゲットの確認が容易である。
- 穿刺針の挿入の様子がリアルタイムで表示される。
- ナビゲーションラインが表示されるので、ターゲットを正確に生検することができる。
- ガントリーがないため、作業スペースが比較的広い。



**CTガイド下IVRが難しい症例でも
容易に手技が可能な場合がある。**