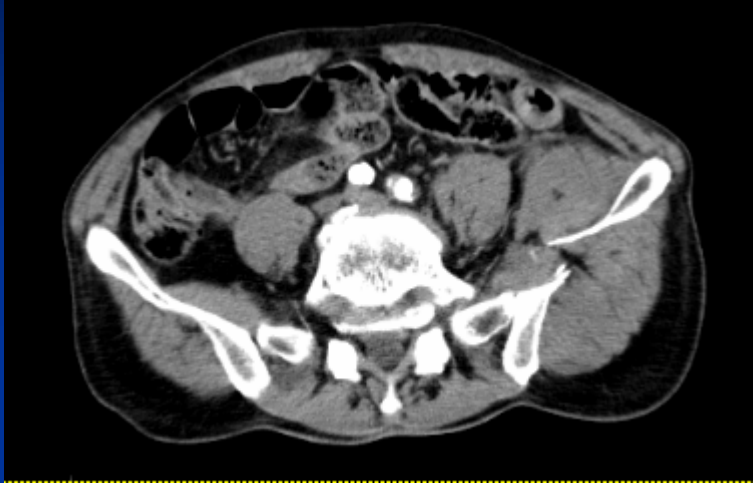


70歳代後半 男性

軽乗用車にひかれた歩行者。
左側頭部出血、左股関節腫張あり。

CT (trauma panscan)

動脈相

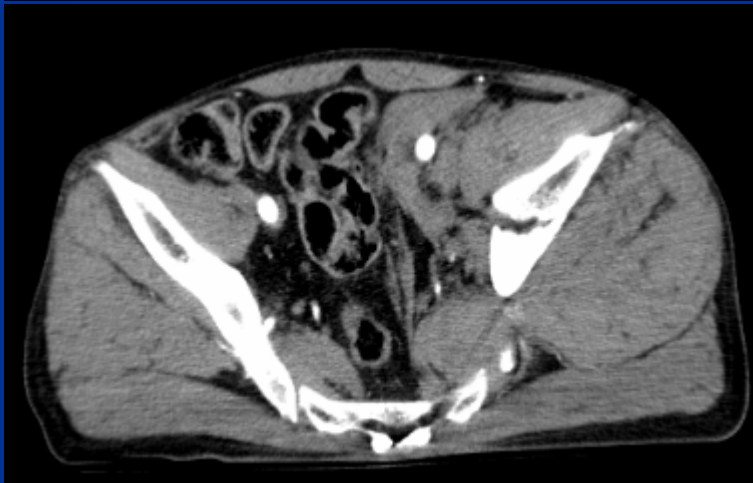
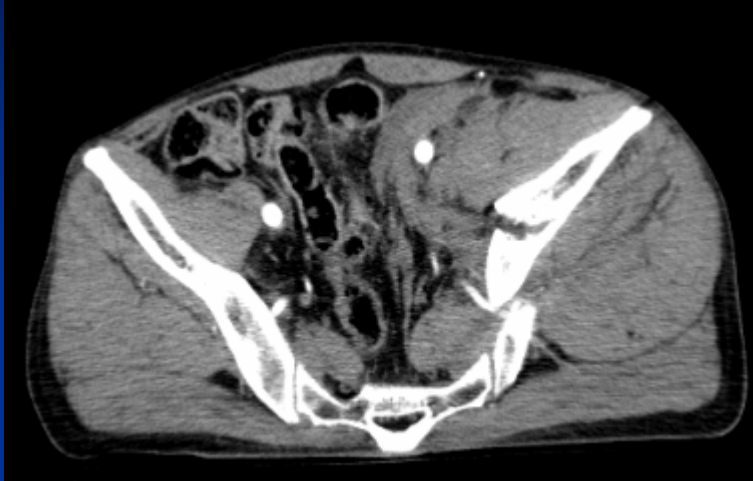


平衡相



CT (trauma panscan)

動脈相

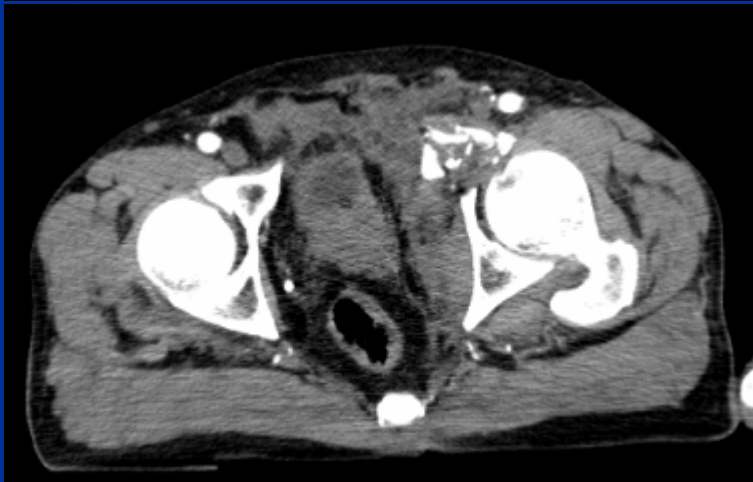


平衡相

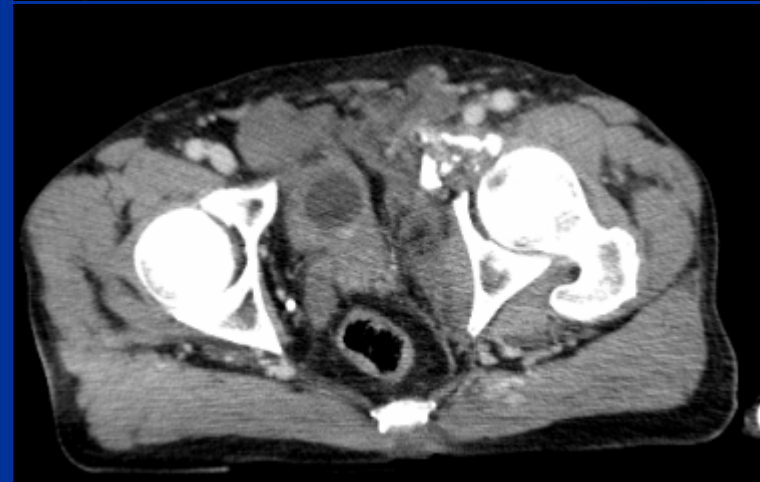


CT (trauma panscan)

動脈相



平衡相



CT (trauma panscan)



PAG



PAG



緊急PAGの再構成画像



左内腸骨動脈造影

RIMカテーテルを山越えで挿入



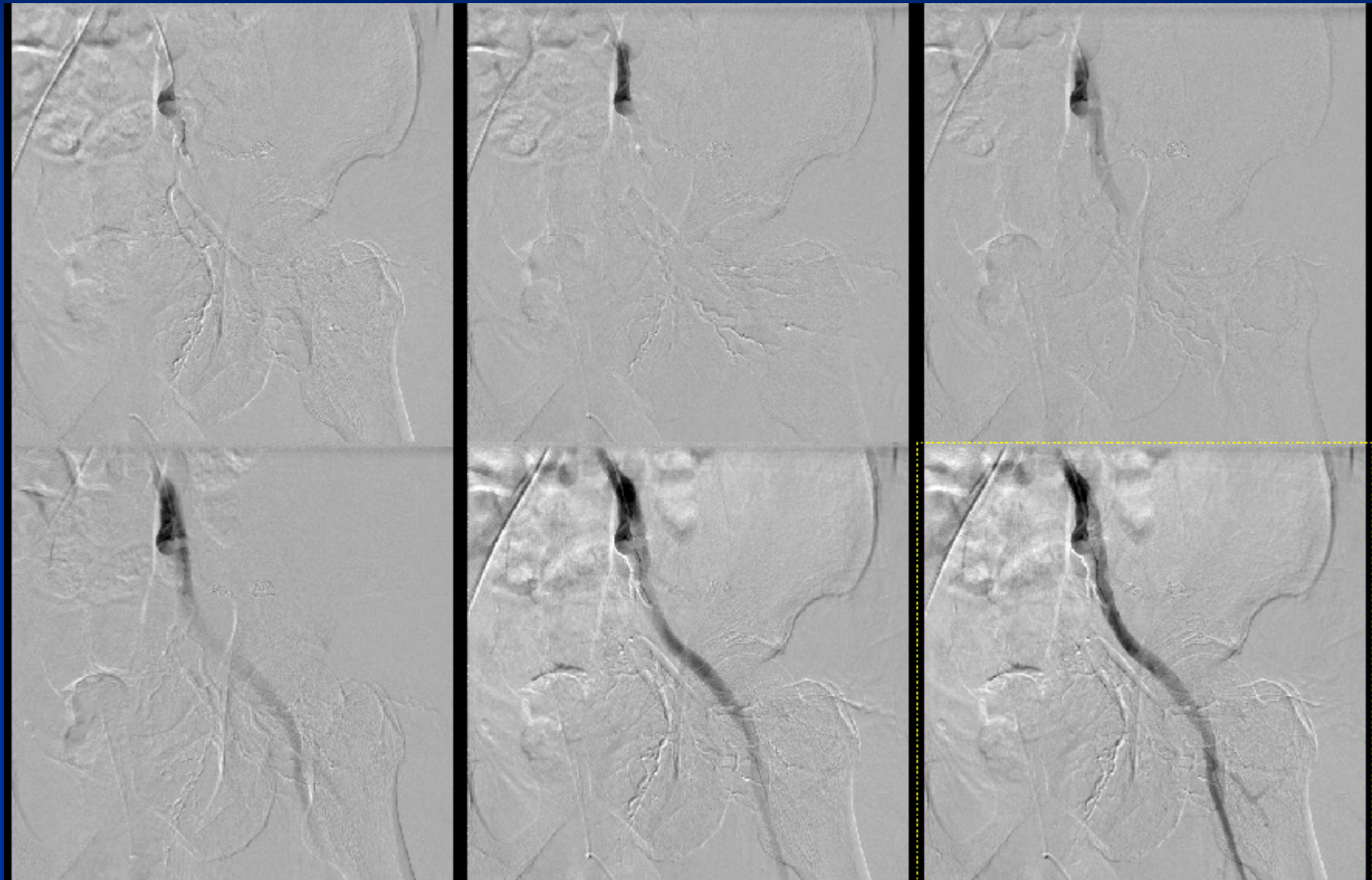
C2カテーテルに入れ替え、
左上腎動脈の血管外漏出部の遠位まで到達
→ 漏出部をまたぐようにコイル塞栓



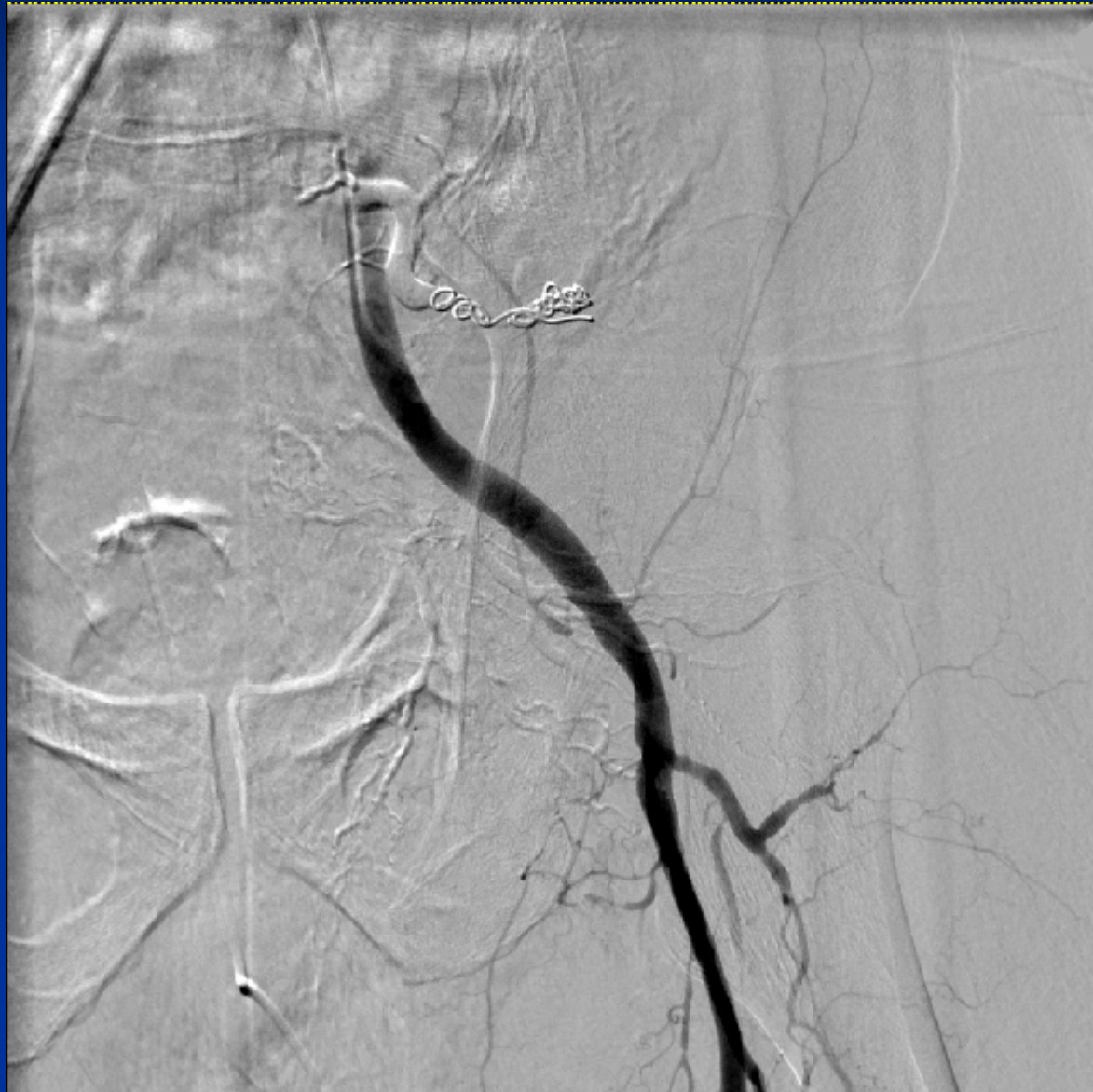
左上腎動脈コイル塞栓 直後の確認造影



左内腸骨動脈起始部より
ゼルフォーム細片にて追加塞栓
→ 同部の確認造影



最後に左外腸骨動脈造影



<i>Time</i>	<i>Condition</i>
20:34	No: 1 Rest

Vital signs

<i>Time</i>	<i>NIBPs [mmHg]</i>	<i>NIBPs [mmHg]</i>	<i>NIBPs [mmHg]</i>	<i>Heart rate [bpm]</i>	<i>SpO2 [%]</i>
20:47				106	
20:52	95	63	74	103	100
20:57				112	100
21:02	103	67	79	104	100
21:07	98	59	72	103	
21:12				100	
21:17				117	
21:22				120	
21:26				113	
21:32				119	
21:37				119	99
21:42				124	100
21:47				118	100
21:52				120	98
21:57				107	100
22:02				109	100
22:07				114	100
22:12				118	100
22:17				120	100
22:21				125	

Recording on

<i>Time</i>	<i>Event Label</i>	<i>Event Comment</i>
20:46	Rec on	

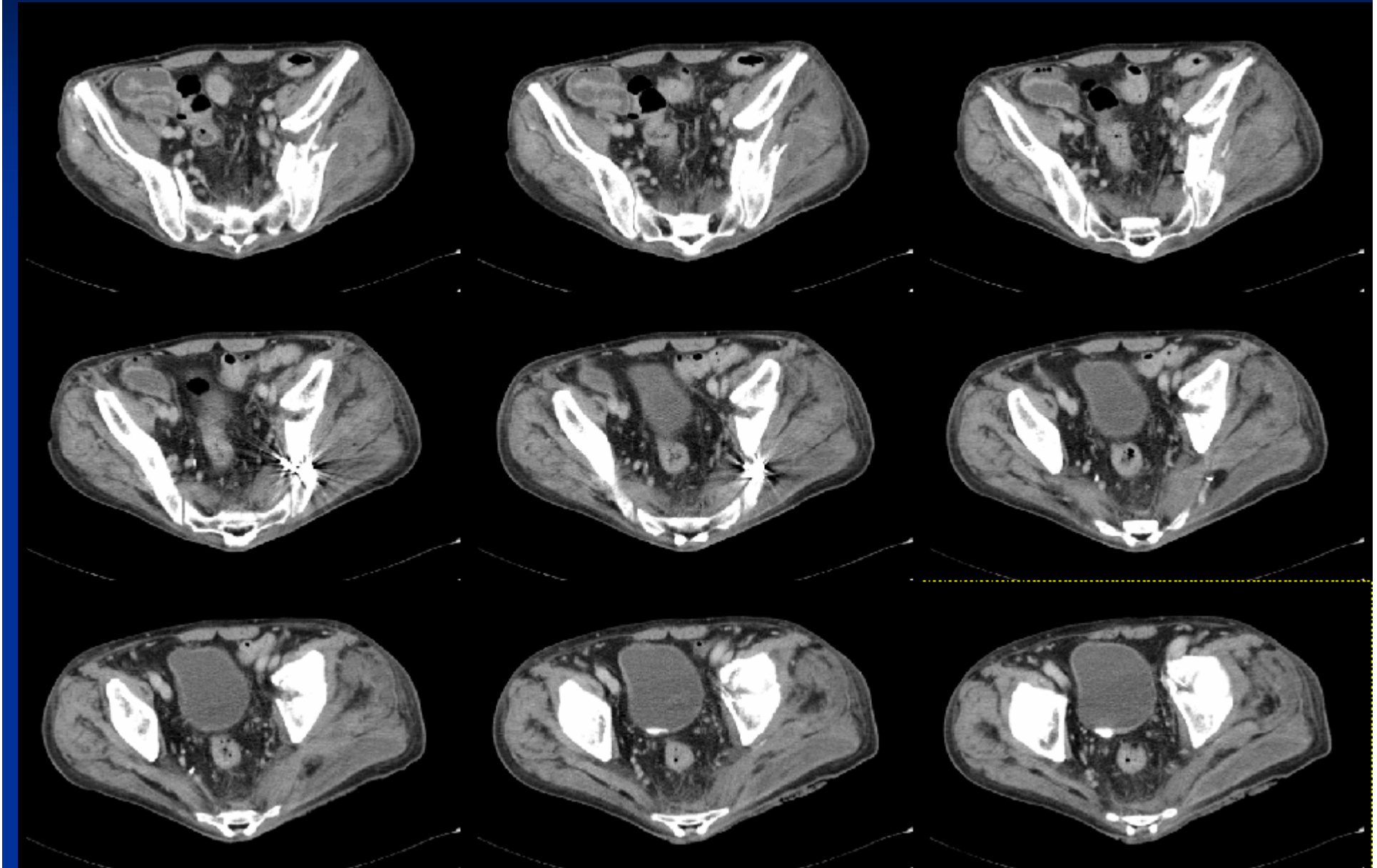
Recording off

<i>Time</i>	<i>Event Label</i>	<i>Event Comment</i>
22:21	Rec off	

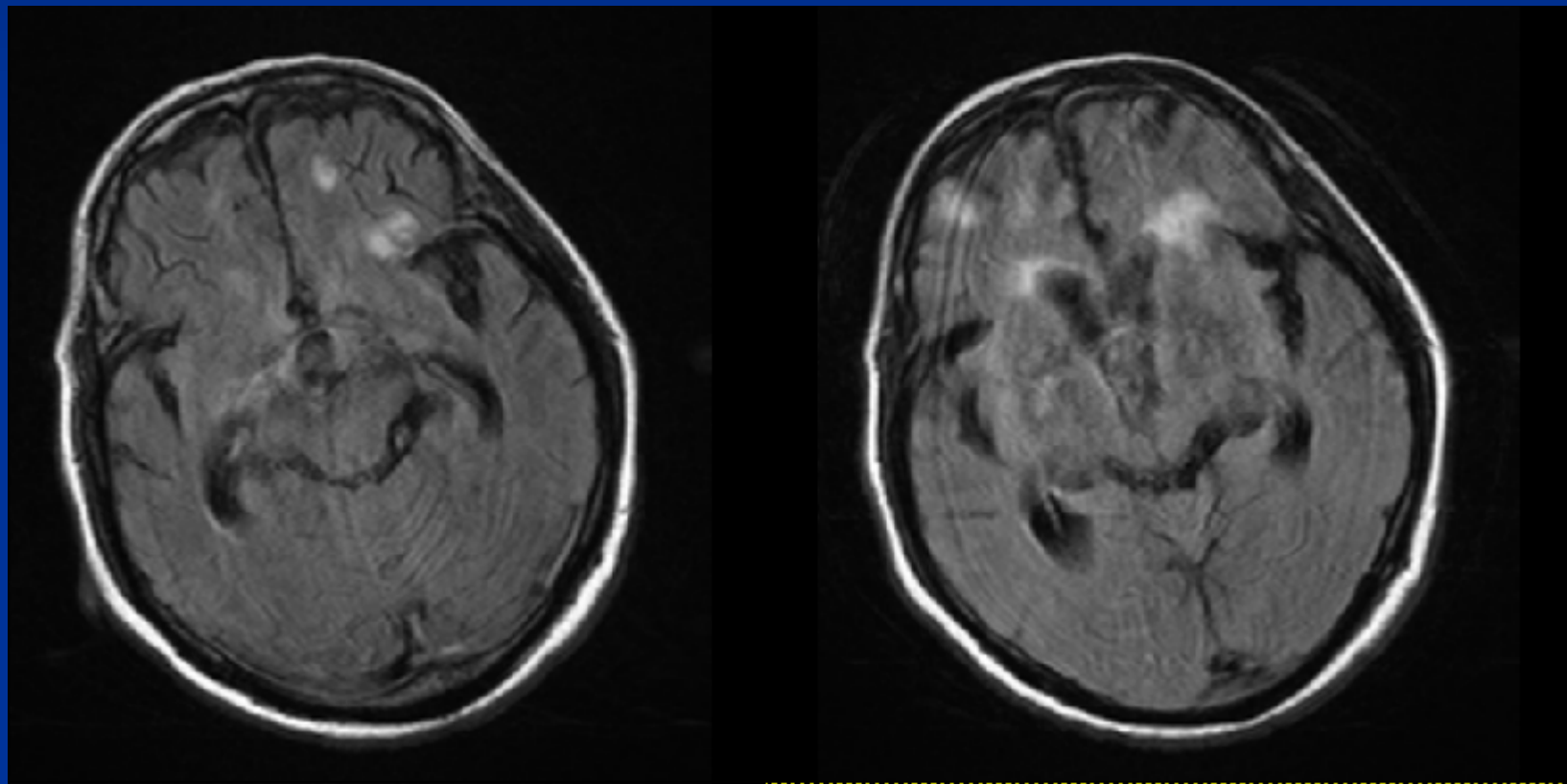
X-ray scene

<i>Time</i>	<i>X-ray scene</i>
20:54	Plane: A RAO/LAO angle [°]: LAO 99.8 Cran./Caud. angle [°]: CD 0.4 SID [cm]: 119.9 Magnification [%]: 152 Mode: DRdyna Tube voltage [kV]: 81.9 Tube current [mA]: 283.8 Pulse width [ms]: 12.1 Time of scene [s]: 5.2 Focus: small Detector size [cm]: 48 Area dose [cGycm²]: 2229 Skin dose [mGy]: 71 Cu filter [mmCu]: 0.0 Number of frames [Frames]: 133
21:12	Plane: A RAO/LAO angle [°]: RAO 2.3 Cran./Caud. angle [°]: CR 0.0 SID [cm]: 119.9 Magnification [%]: 152 Mode: DSA Tube voltage [kV]: 71.7 Tube current [mA]: 332.7 Frame rate [fps]: 4.00 Pulse width [ms]: 100.0 Time of scene [s]: 6.3 Focus: small Detector size [cm]: 32 Area dose [cGycm²]: 676 Skin dose [mGy]: 49 Cu filter [mmCu]: 0.1 Number of frames [Frames]: 24
21:51	Plane: A RAO/LAO angle [°]: RAO 2.3 Cran./Caud. angle [°]: CR 0.0 SID [cm]: 119.9 Magnification [%]: 152 Mode: DSA Tube voltage [kV]: 74.6 Tube current [mA]: 319.9 Frame rate [fps]: 4.00 Pulse width [ms]: 100.0 Time of scene [s]: 6.3 Focus: small Detector size [cm]: 32 Area dose [cGycm²]: 719 Skin dose [mGy]: 52 Cu filter [mmCu]: 0.1 Number of frames [Frames]: 24
21:56	Plane: A RAO/LAO angle [°]: RAO 2.3 Cran./Caud. angle [°]: CR 0.0 SID [cm]: 119.9 Magnification [%]: 152 Mode: DSA Tube voltage [kV]: 77.5 Tube current [mA]: 307.6 Frame rate [fps]: 4.00 Pulse width [ms]: 99.6 Time of scene [s]: 6.3 Focus: small Detector size [cm]: 32 Area dose [cGycm²]: 760 Skin dose [mGy]: 55 Cu filter [mmCu]: 0.1 Number of frames [Frames]: 24
21:57	Plane: A RAO/LAO angle [°]: RAO 2.3 Cran./Caud. angle [°]: CR 0.0 SID [cm]: 119.9 Magnification [%]: 152 Mode: DSA Tube voltage [kV]: 80.5 Tube current [mA]: 212.8 Frame rate [fps]: 4.00 Pulse width [ms]: 99.9 Time of scene [s]: 12.2 Focus: small Detector size [cm]: 32 Area dose [cGycm²]: 2157 Skin dose [mGy]: 157 Cu filter [mmCu]: 0.0 Number of frames [Frames]: 46
22:00	Plane: A RAO/LAO angle [°]: RAO 2.3 Cran./Caud. angle [°]: CR 0.0 SID [cm]: 119.9 Magnification [%]: 152 Mode: DSA Tube voltage [kV]: 78.6 Tube current [mA]: 218.3 Frame rate [fps]: 4.00 Pulse width [ms]: 100.0 Time of scene [s]: 15.1 Focus: small Detector size [cm]: 32 Area dose [cGycm²]: 2623 Skin dose [mGy]: 191 Cu filter [mmCu]: 0.0 Number of frames [Frames]: 57

約2ヶ月後のCT



約2ヶ月後の脳MRI FLAIR



結語

- 骨盤骨折の治療予後のリスク因子として、高齢者、頭部外傷の合併が挙げられる。
- 今回、高齢かつ頭部外傷合併例の救命に成功した。

討論

- 高齢者で頭部外傷を合併した骨盤骨折の救命例は初めてである
- コメント:カテーテルは4Fコブラではなくシェファードフックなどがbetter。