



The dark side of the guidelines

1st Interventional Radiologist under 40 Meeting

Emergencies in Interventional Radiology



21-23 Novembre 2016

Bologna

Società Medica Chirurgica - Palazzo dell'Archiginnasio

EMBOLIZZAZIONE UTERINE

Tecnica & Casi Clinici

Francesco Giurazza

MD, PhDs



22 Novembre 2016

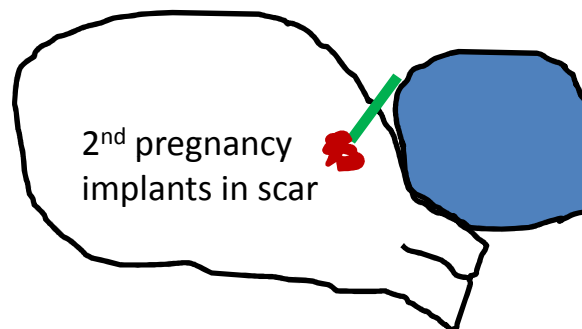
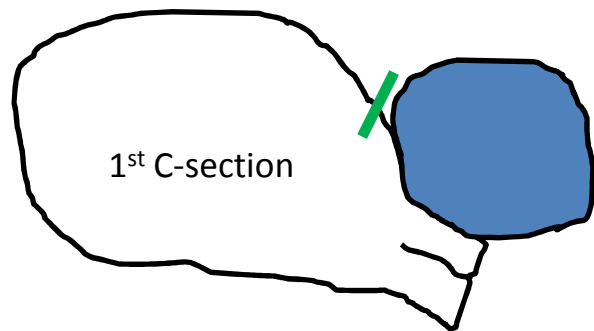


Antonio Cardarelli

AZIENDA OSPEDALIERA DI RILIEVO NAZIONALE

Donna 39 aa
1 IVG alla 6 settimana
Terzo taglio cesareo
Provincia di Napoli



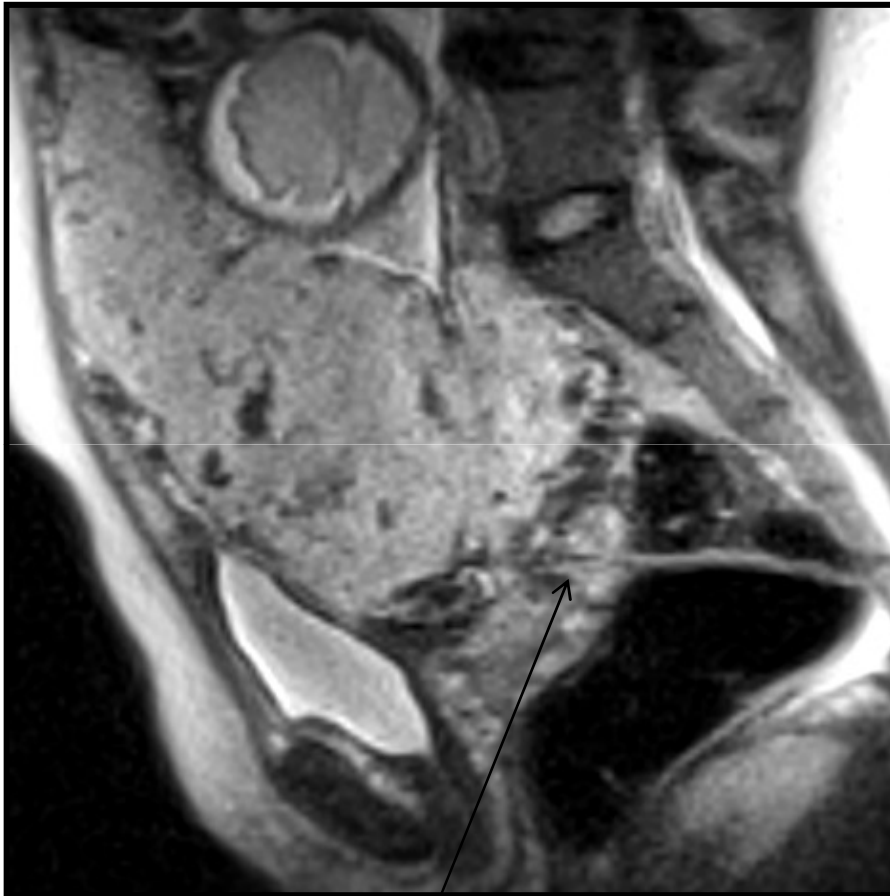


Numero di parti e tasso di taglio cesareo Italia 2013 (Ministero della Salute)

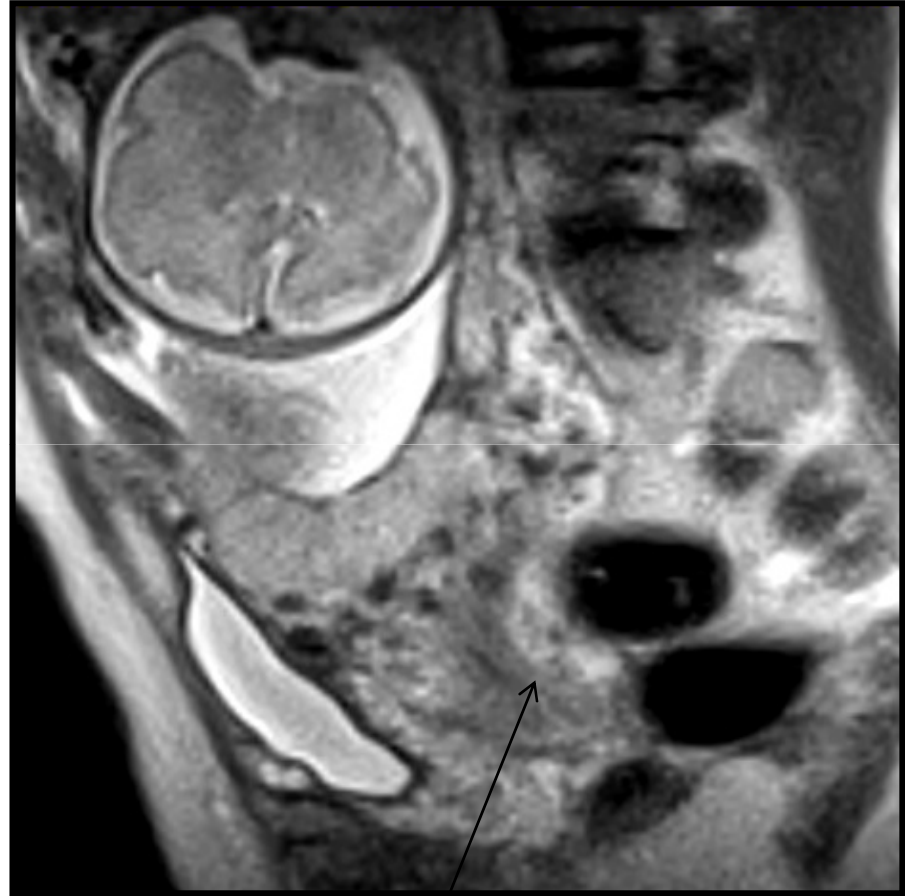
Regione	Parti (n)	Taglio Cesareo (%)	Regione	Parti (n)	Taglio Cesareo (%)
Piemonte	33.147	29,5	Marche	12.253	30,5
Valle d'Aosta	1.127	20,9	Lazio	50.132	40,8
Lombardia	87.771	27,8	Abruzzo	10.055	37,8
Provincia Autonoma Bolzano	5.452	24,1	Molise	1.791	46,9
Provincia Autonoma Trento	4.631	25,1	Campania	53.340	59,5
Veneto	40.906	27,0	Puglia	33.758	44,0
Friuli Venezia Giulia	9.320	23,9	Basilicata	4.074	39,4
Liguria	10.543	34,5	Calabria	15.969	34,2
Emilia Romagna	37.323	28,1	Sicilia	43.526	44,2
Toscana	29.316	21,0	Sardegna	11.354	38,5
Umbria	7.484	31,5			
Totale	Parti	503.272	Taglio Cesareo	35,5%	

RM T2-w
32 settimane

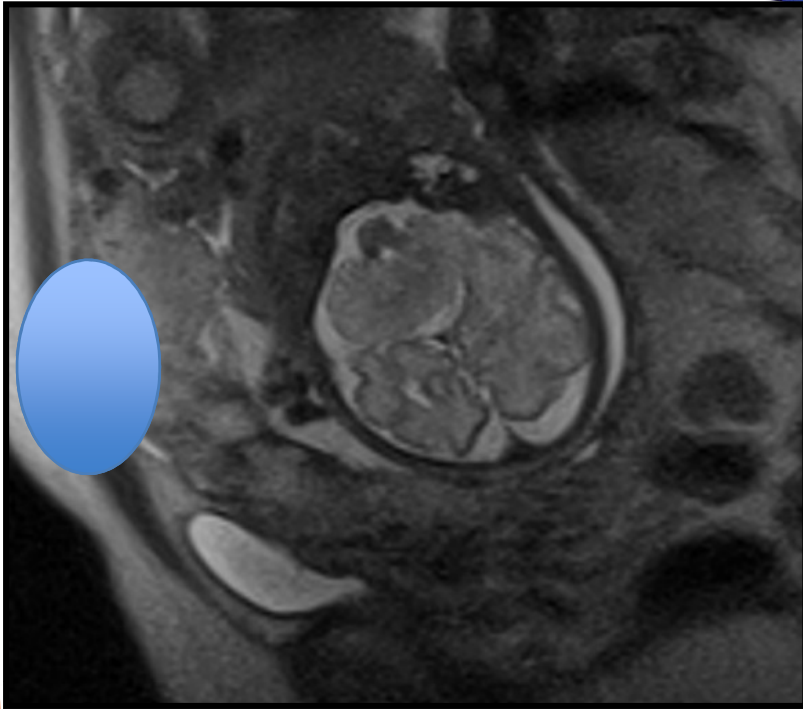
Placenta Previa Percreta



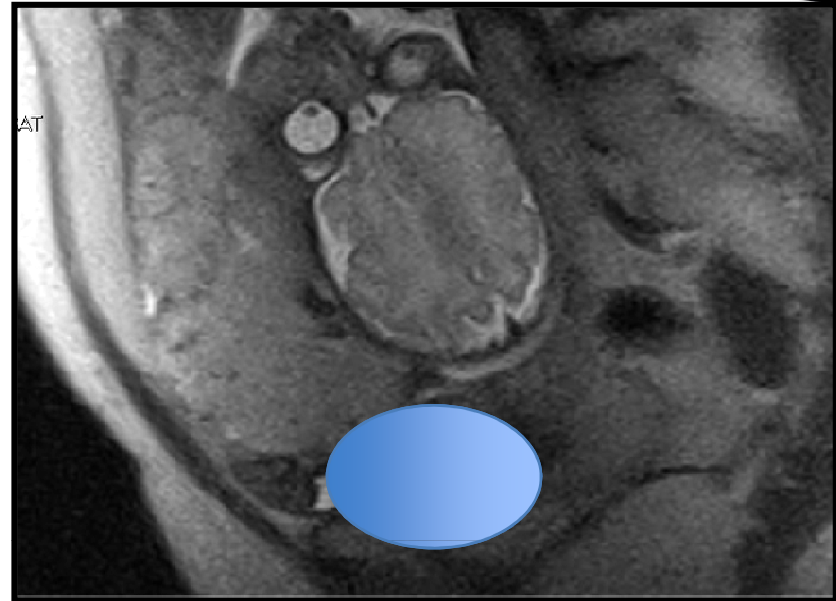
Vasi placentari extrauterini (lacune vascolari)



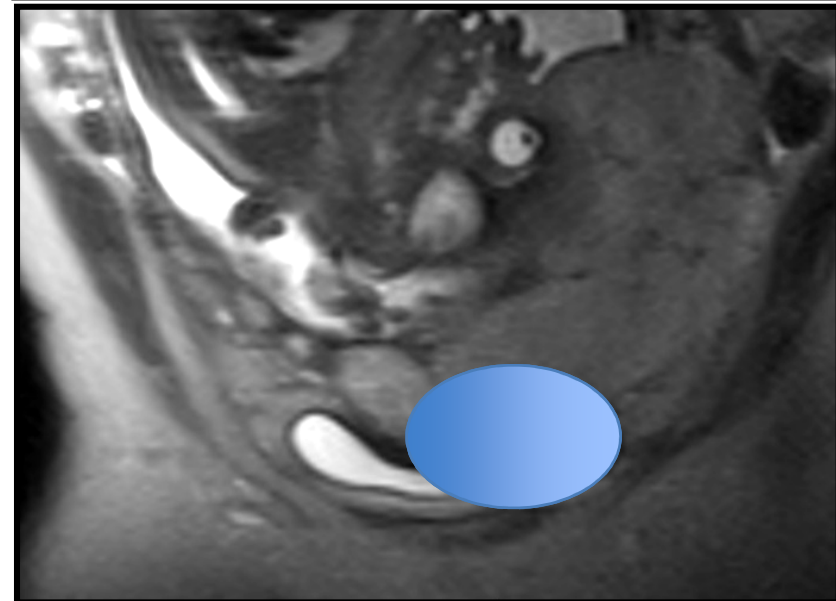
Cervice

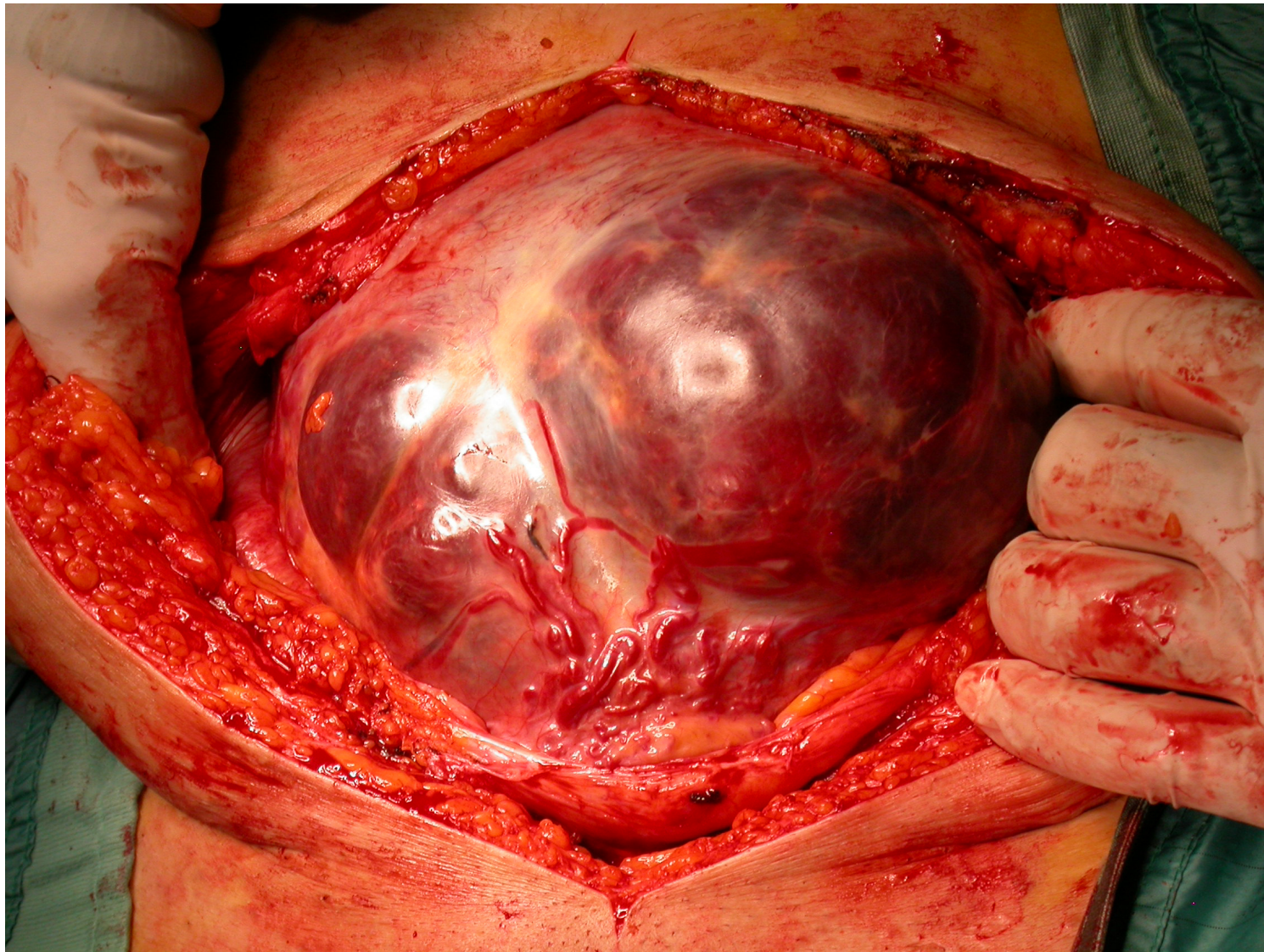


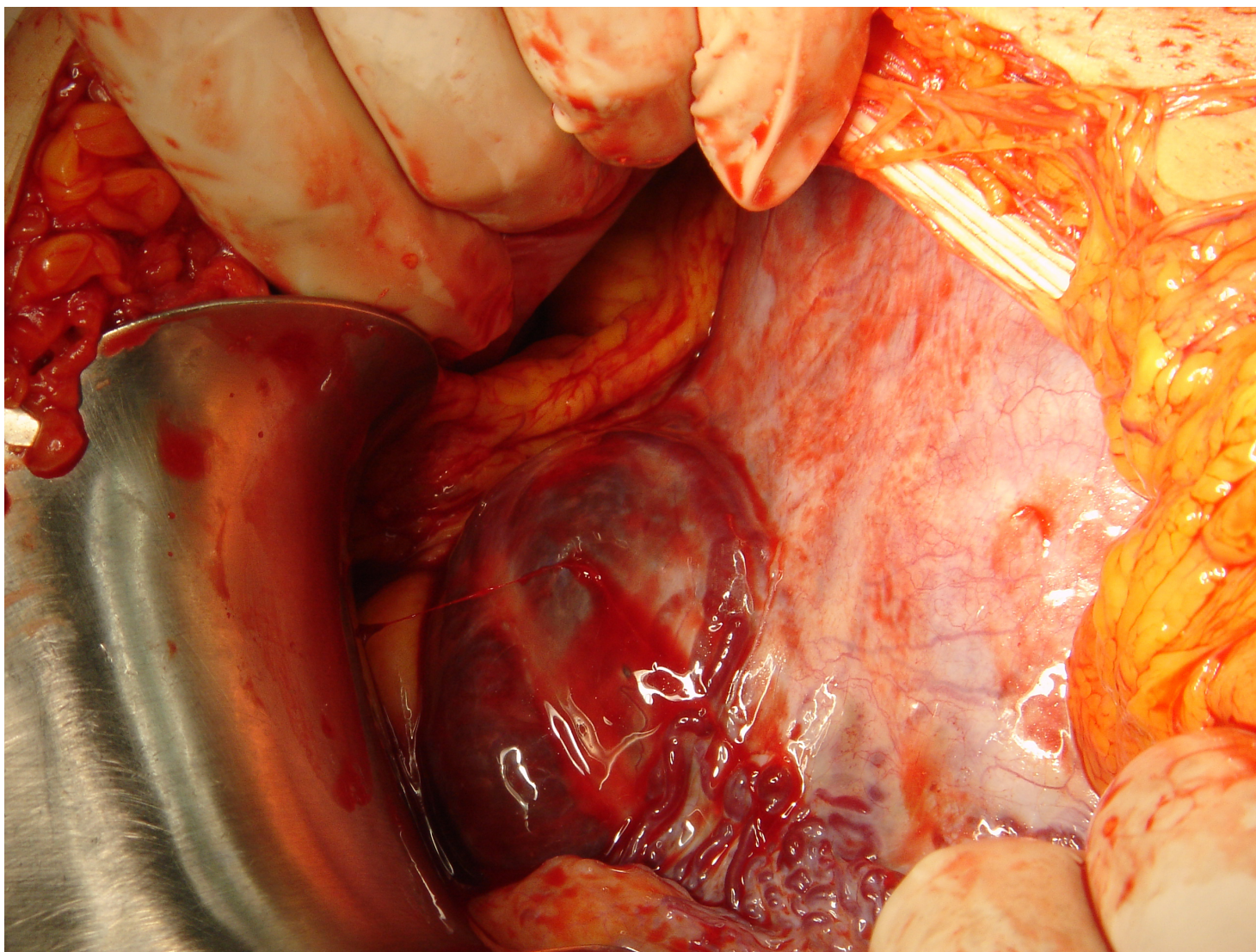
Infiltrazione m. retto addominale



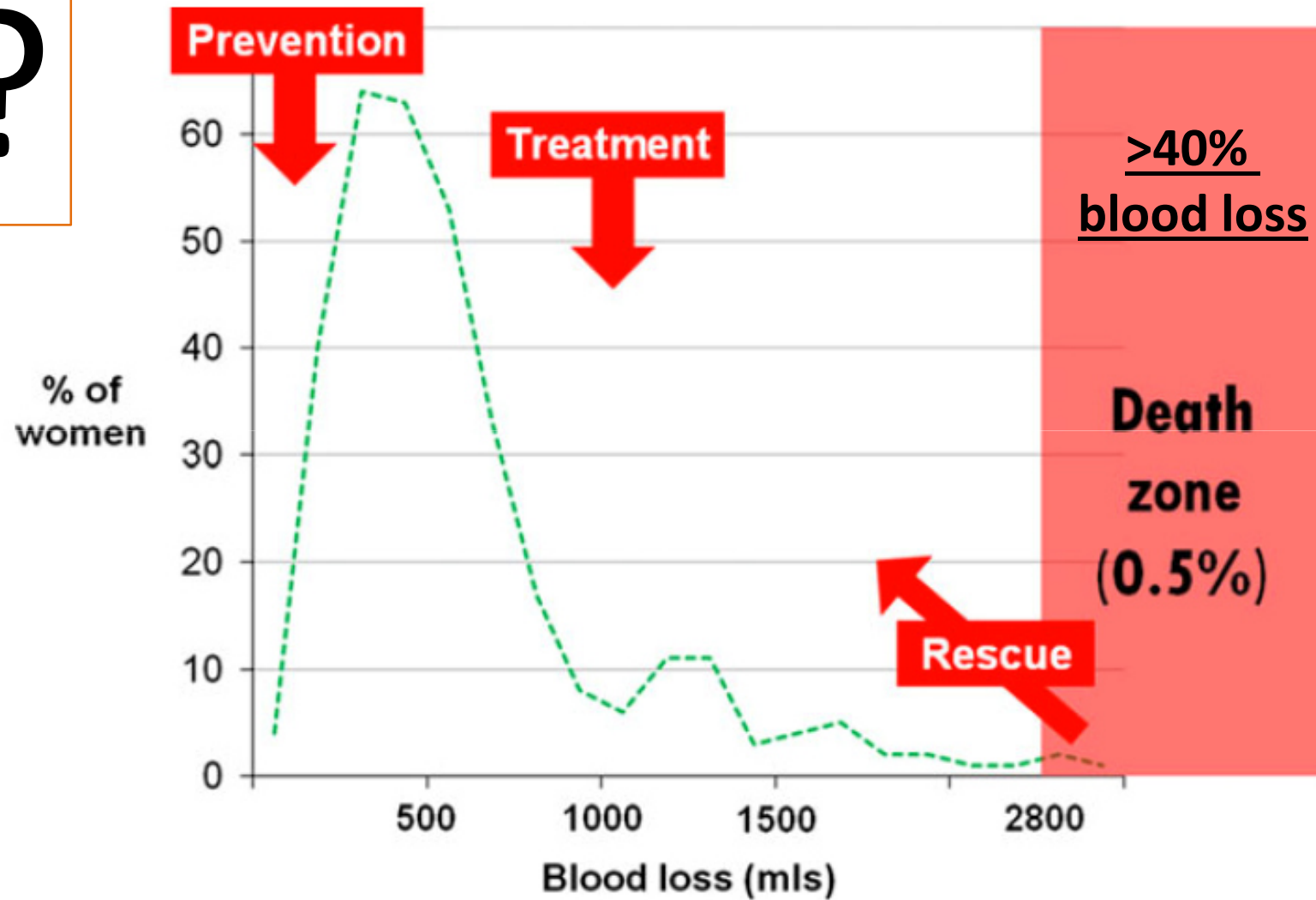
Infiltrazione vescicale



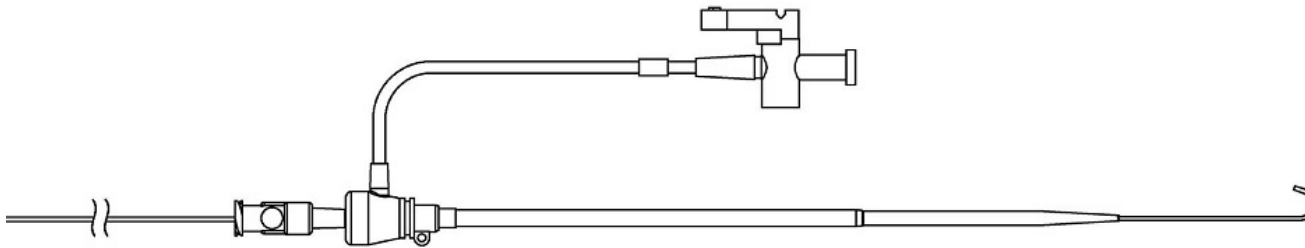




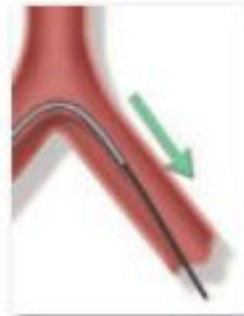
?



Weeks A, BJOG 2015;122:202-212



4Fr, **5Fr**, 6Fr, **7Fr** !!!!



Straight (4 Fr)
Straight taper (5 Fr)



Angle (4 Fr)
Angle taper (5 Fr)



Cobra 1
(C1)



Cobra 2
(C2)



J-tip



Multipurpose
(MP)

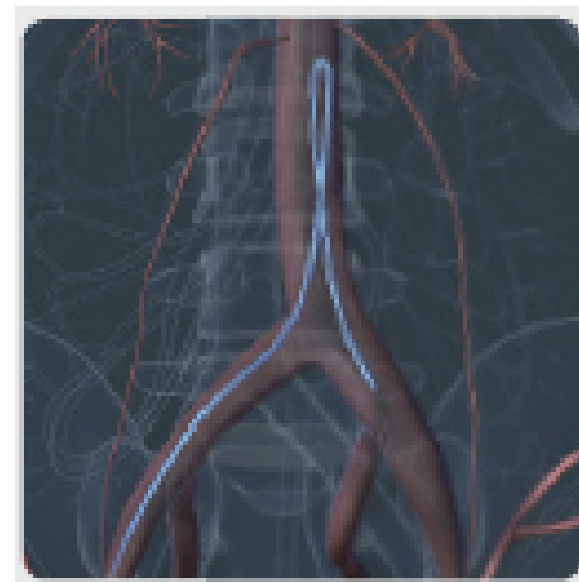
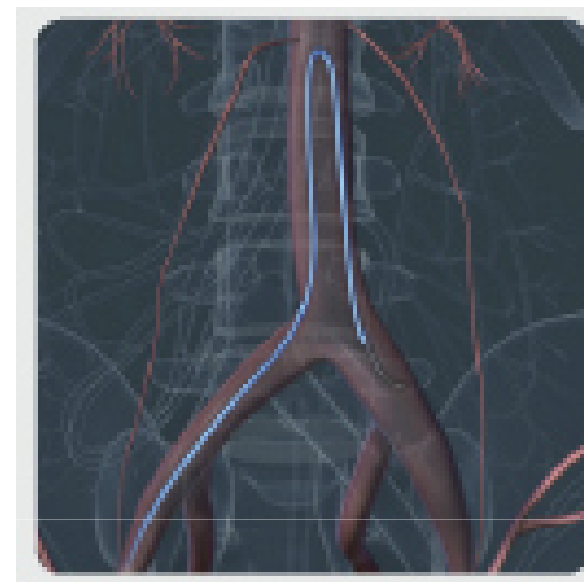
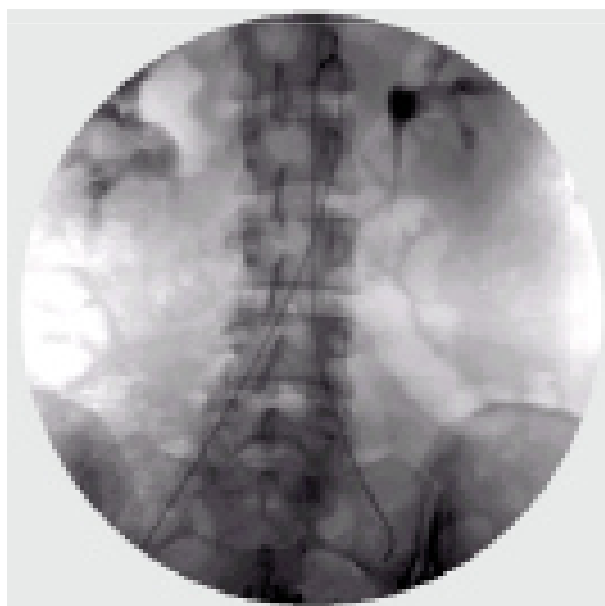
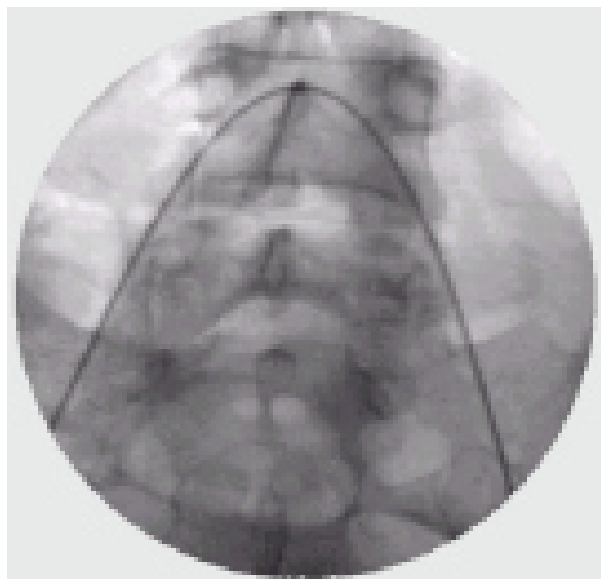


Simmons 1
(Sim 1)



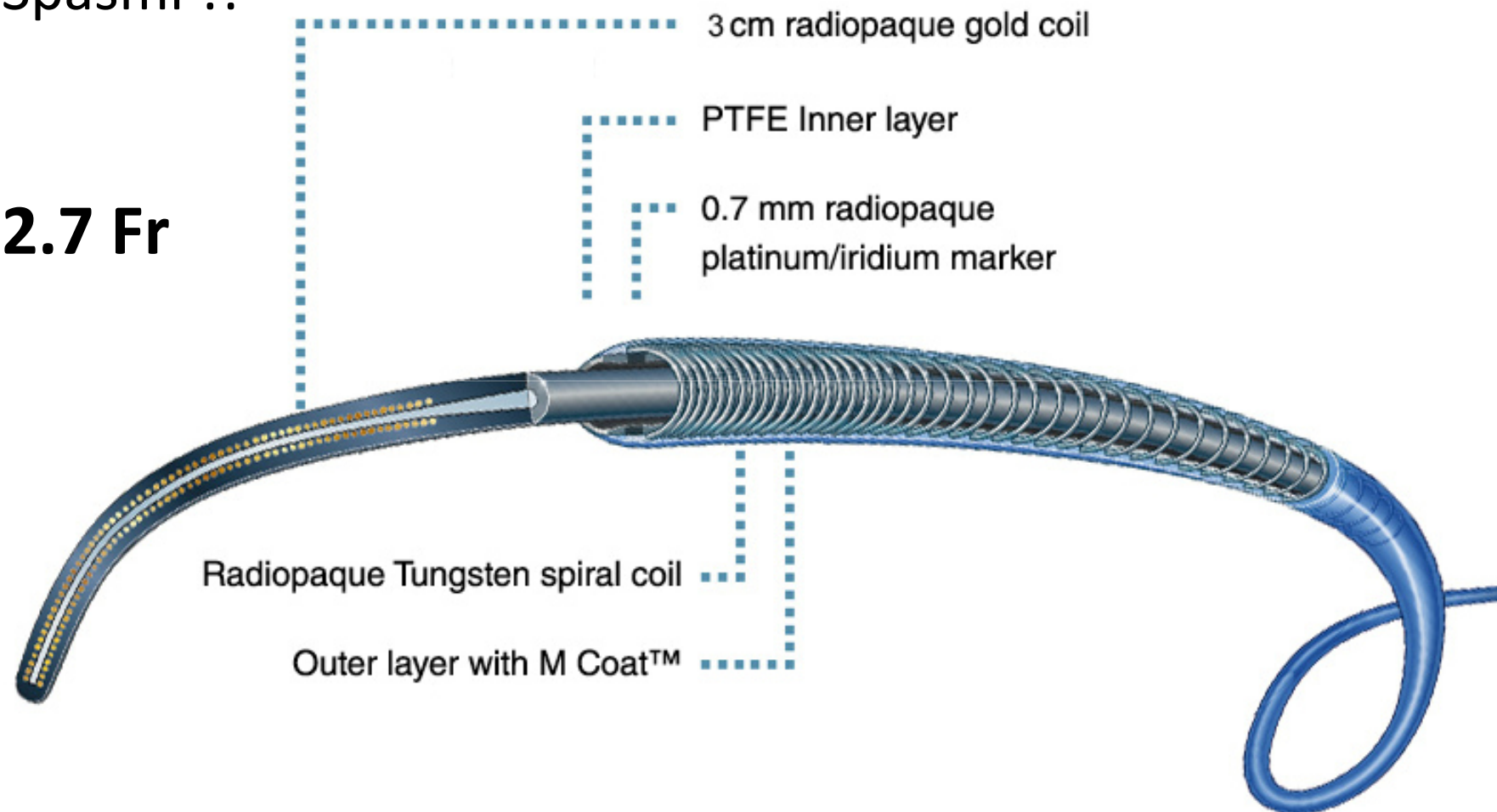
Simmons 2
(Sim 2)

The dark side of the guidelines

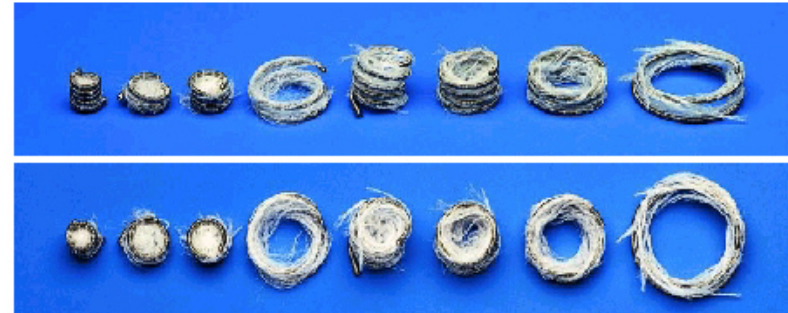


Spasmi !!

2.7 Fr



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Tornando alla Paziente...

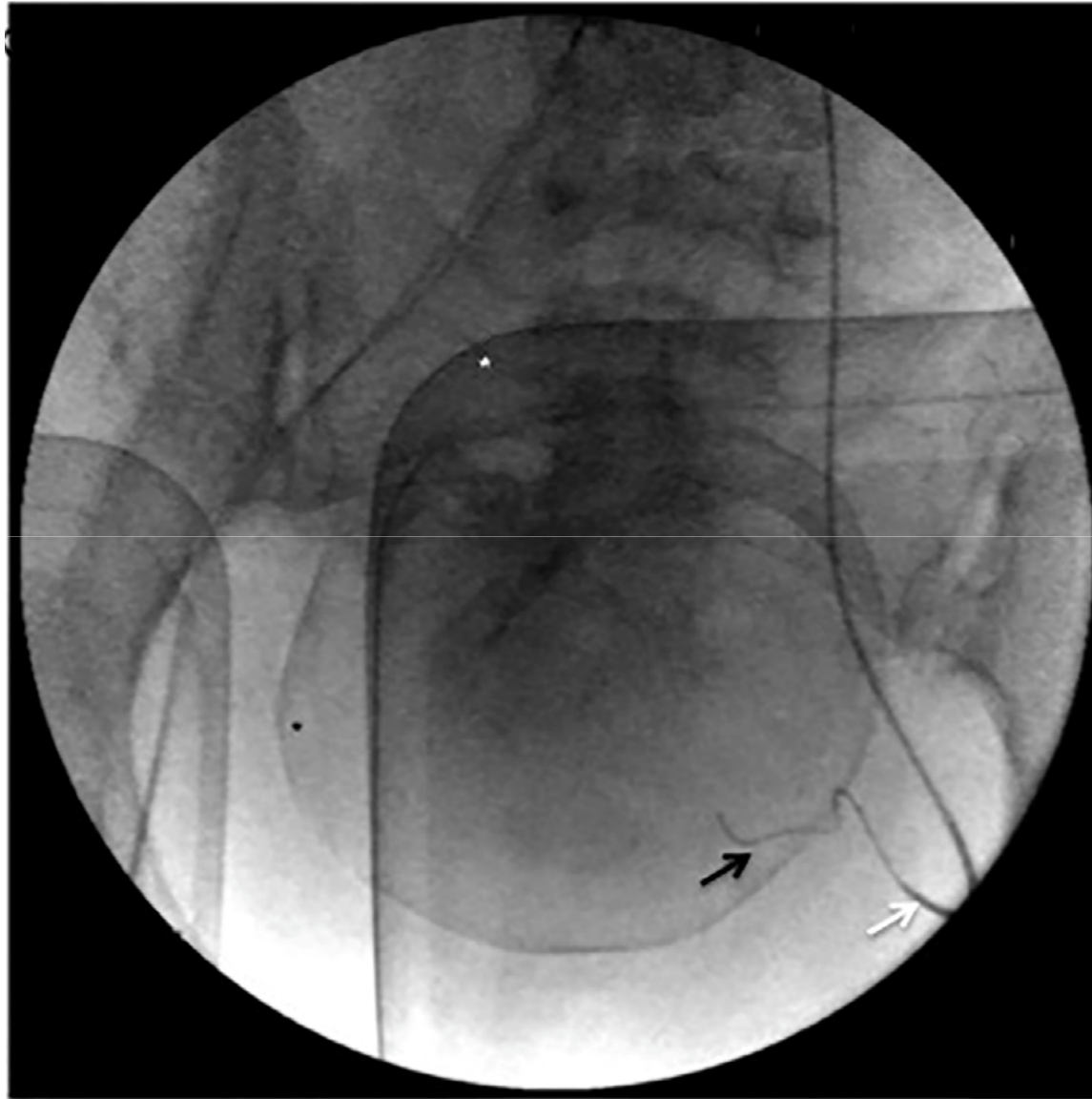
Camera operatoria di ginecologia con posizionamento di arco a fluoroscopico

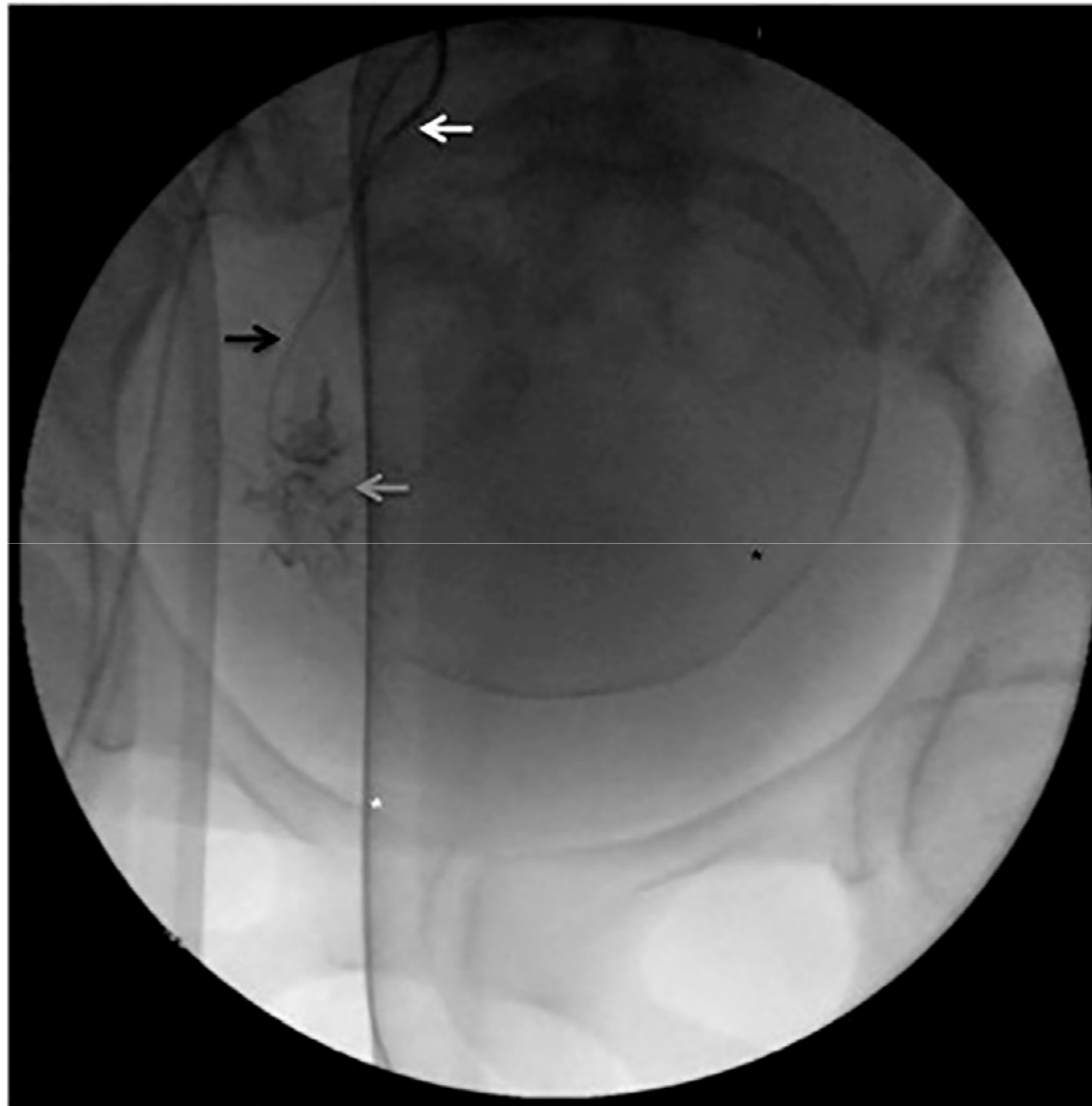
Accesso femorale destro monolaterale (5Fr)

Catetere Cobra 5Fr per incannulare l'arteria iliaca interna bilateralmente

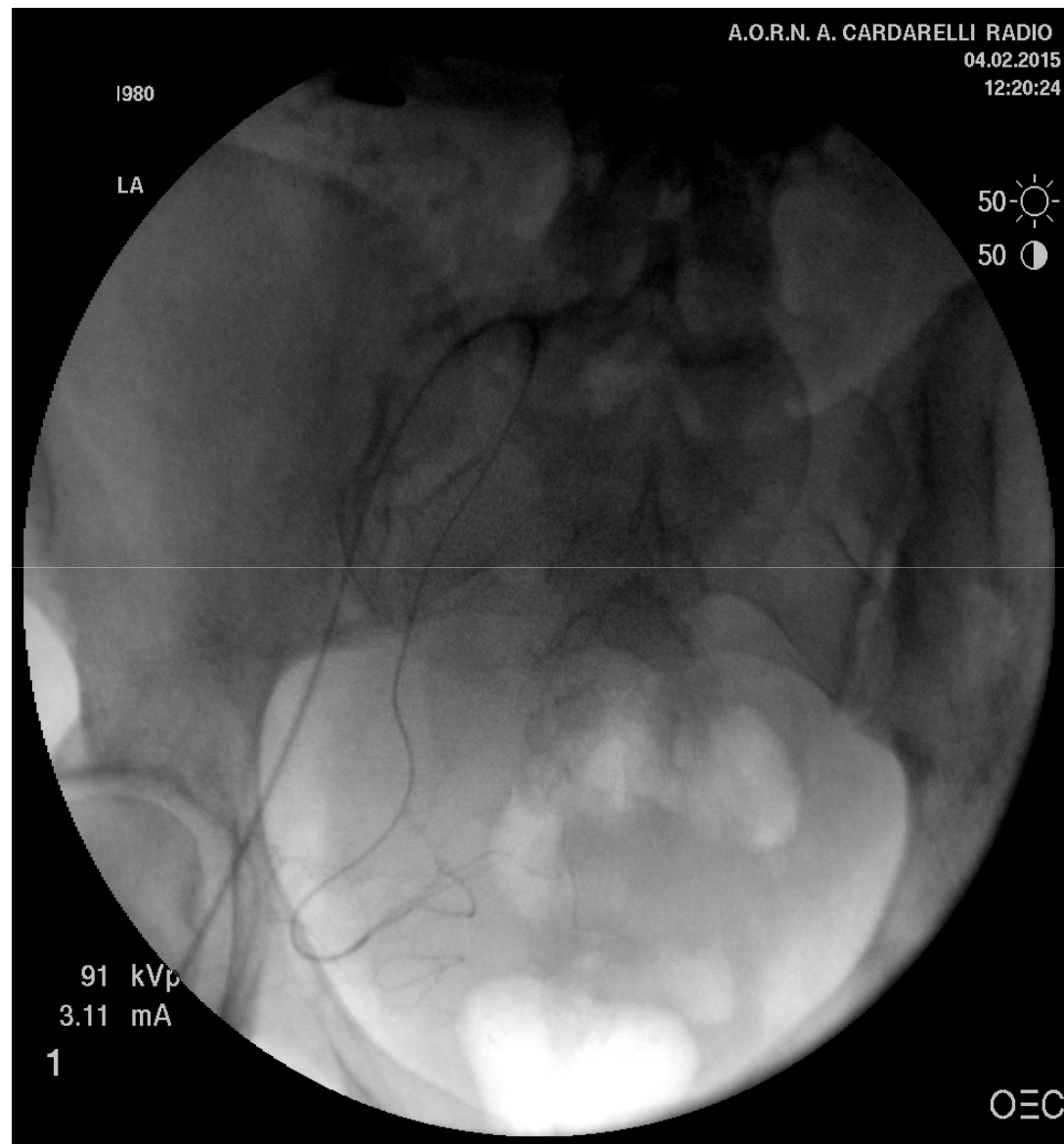
Microcateterismo coassiale superselettivo 2.7Fr delle arterie uterine

Iniezione di **schiuma riassorbibile** (10mm Spongel, Yamanouchi, Japan)



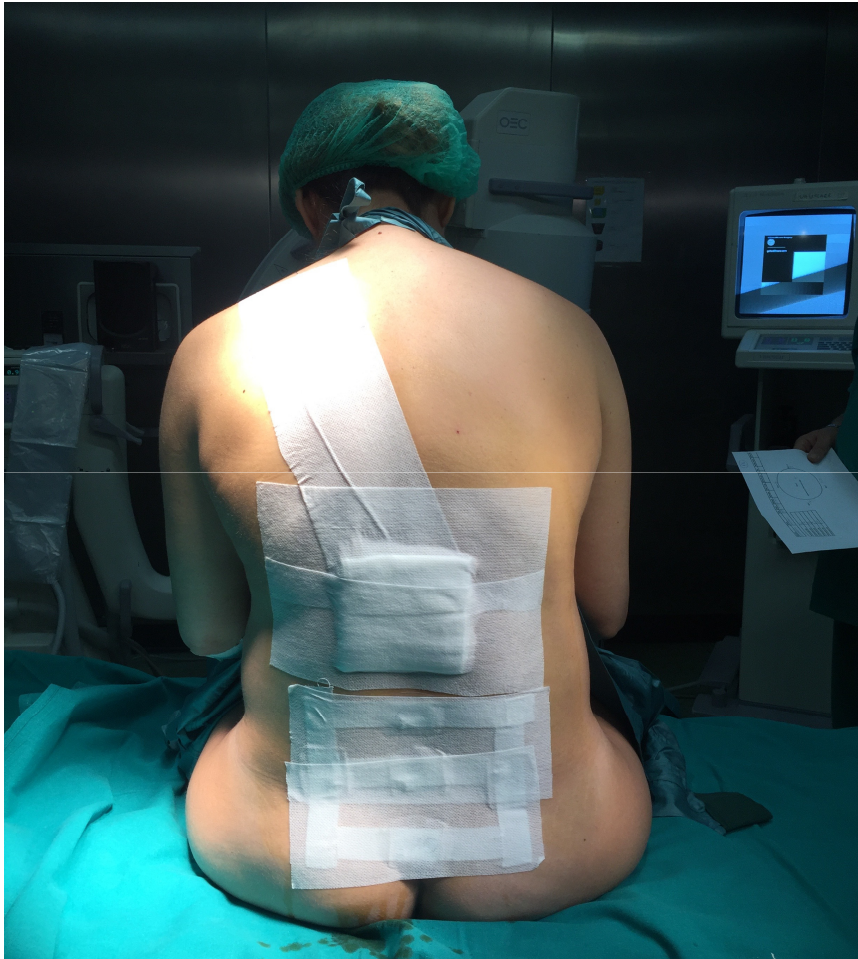


The dark side of the guidelines



The dark side of the guidelines





- Standardization of procedural setting
- Appropriate balance between image quality and radiation dose to the fetus
- Low-dose rate pulsed fluoroscopy
- No angiography exposure
- Use of the “last image hold”
- No enlargement of the field of view
- Use of a half-dose filter
- Posteroanterior beam projection
- X-ray tube at maximal distance from the patient (40 cm)
- Tube current as low as possible by keeping the tube potential as high as possible
- Beam-on time kept to an absolute minimum



STANDARDS OF PRACTICE

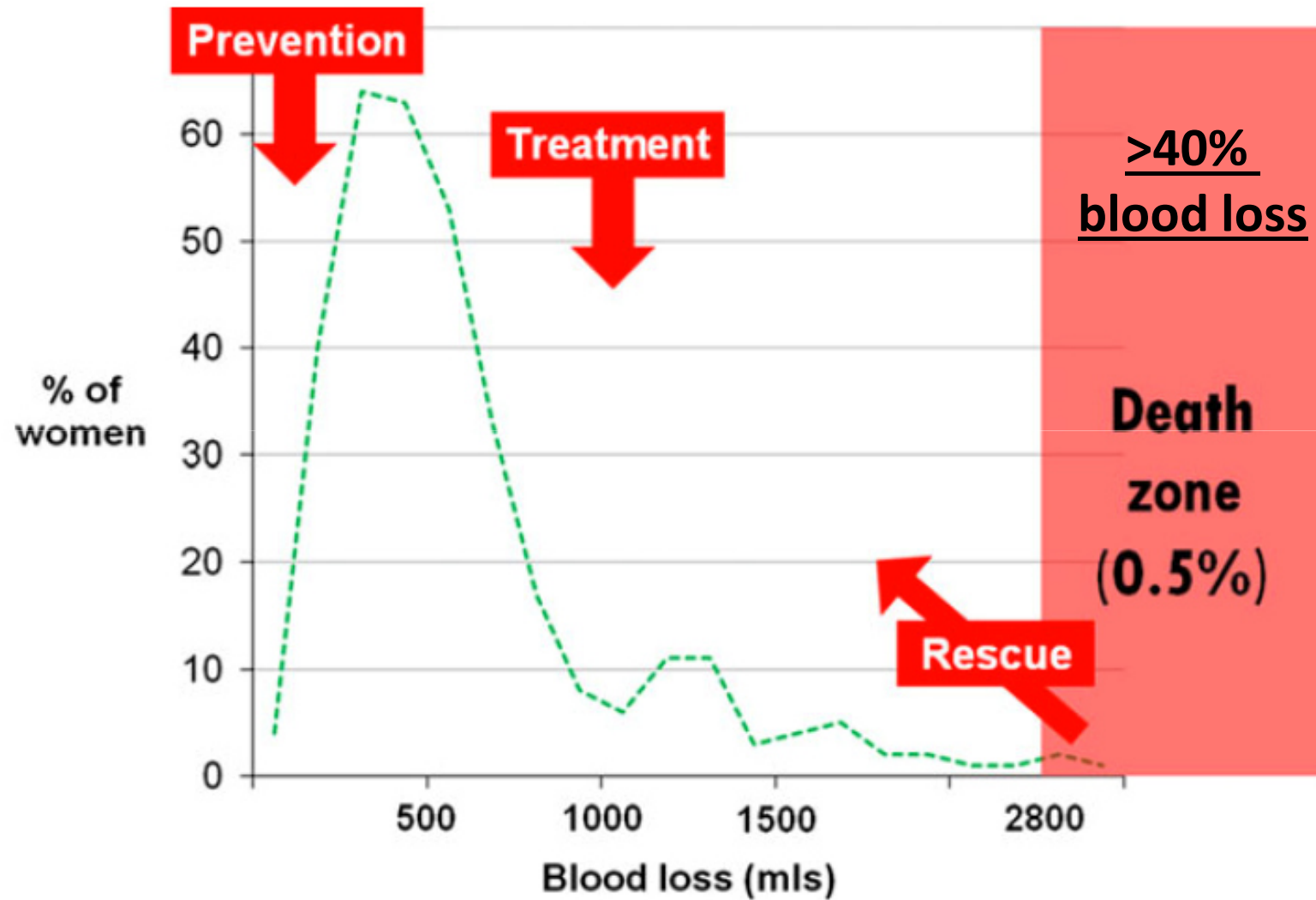
Radiation Management for Interventions Using Fluoroscopic or Computed Tomographic Guidance during Pregnancy: A Joint Guideline of the Society of Interventional Radiology and the Cardiovascular and Interventional Radiological Society of Europe with Endorsement by the Canadian Interventional Radiology Association

Lawrence T. Dauer, PhD, CHP, Raymond H. Thornton, MD, Donald L. Miller, MD, John Damilakis, PhD, Robert G. Dixon, MD, M. Victoria Marx, MD, Beth A. Schueler, PhD, Eliseo Vañó, PhD, Aradhana Venkatesan, MD, Gabriel Bartal, MD, Dimitrios Tsetis, MD, PhD, and John F. Cardella, MD, for the Society of Interventional Radiology Safety and Health Committee and the Cardiovascular and Interventional Radiology Society of Europe Standards of Practice Committee

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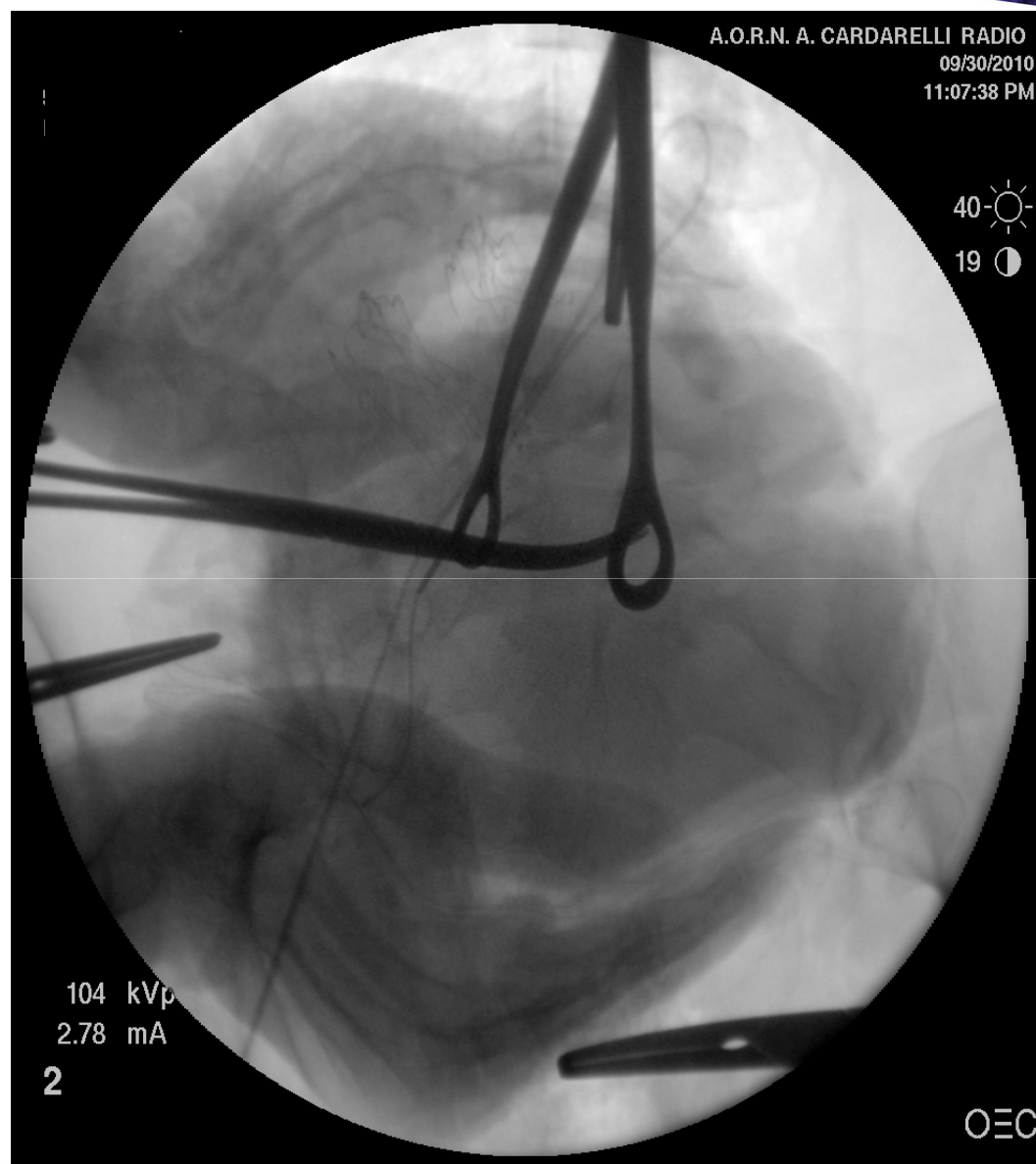
J Vasc Interv Radiol 2012; 23:19–32

DOI: 10.1016/j.jvir.2011.09.007



Weeks A, BJOG 2015;122:202-212

35aa
Il taglio cesareo
No RM pre!



Caso 2

A.O.R.N. A. CARDARELLI RADIO
09/30/2010
10:06:46 PM

55 ☀
64 ☾

82 kVp
15.07 mA
4

OEC

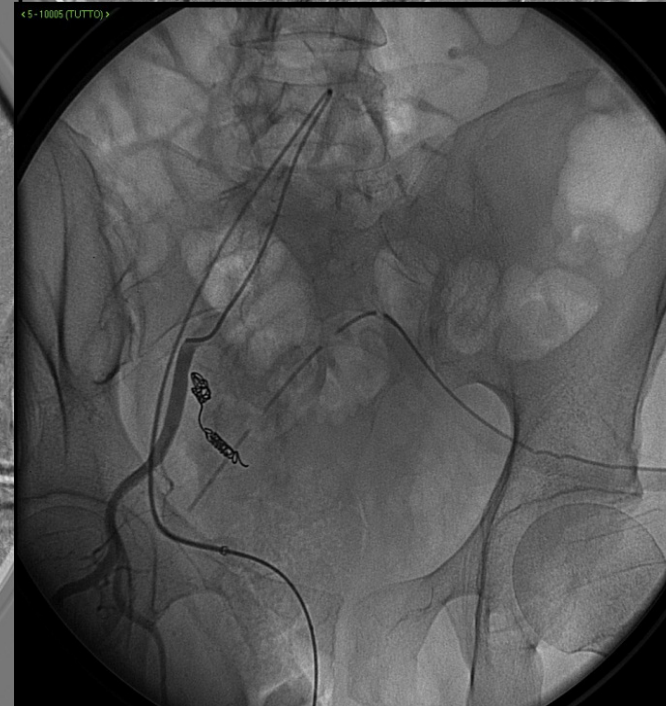
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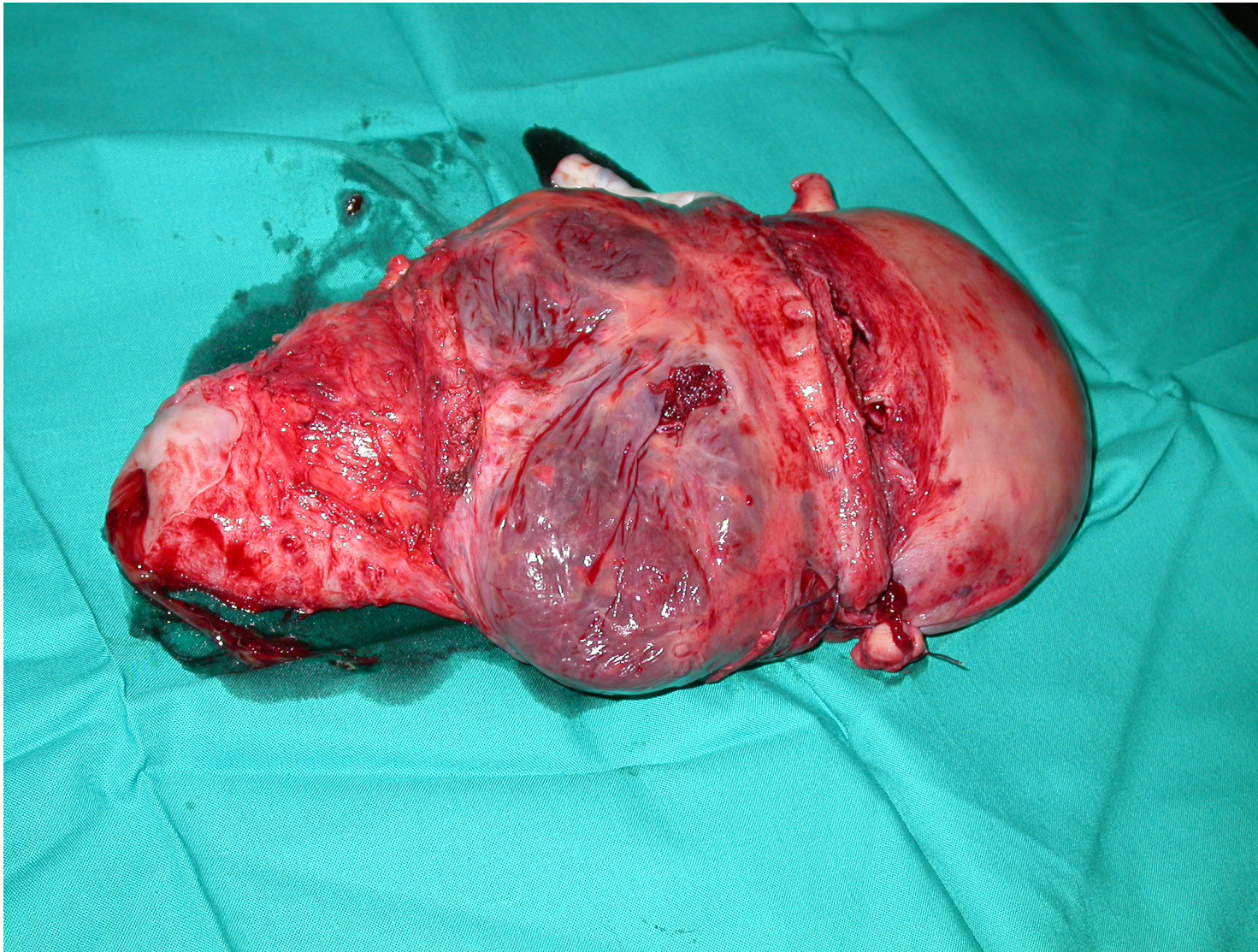
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<2-10009 (TUTTO)>

<5-10005 (TUTTO)>

<2-10009 (TUTTO)>





“pelvic sink” Brotman et al. 1981

Network vascolare per mantenere alto il flusso anche in vasi lesionati e prevenire trombosi

3 loop arteriosi

postero-mediale: lombari segmentarie e vertebrali

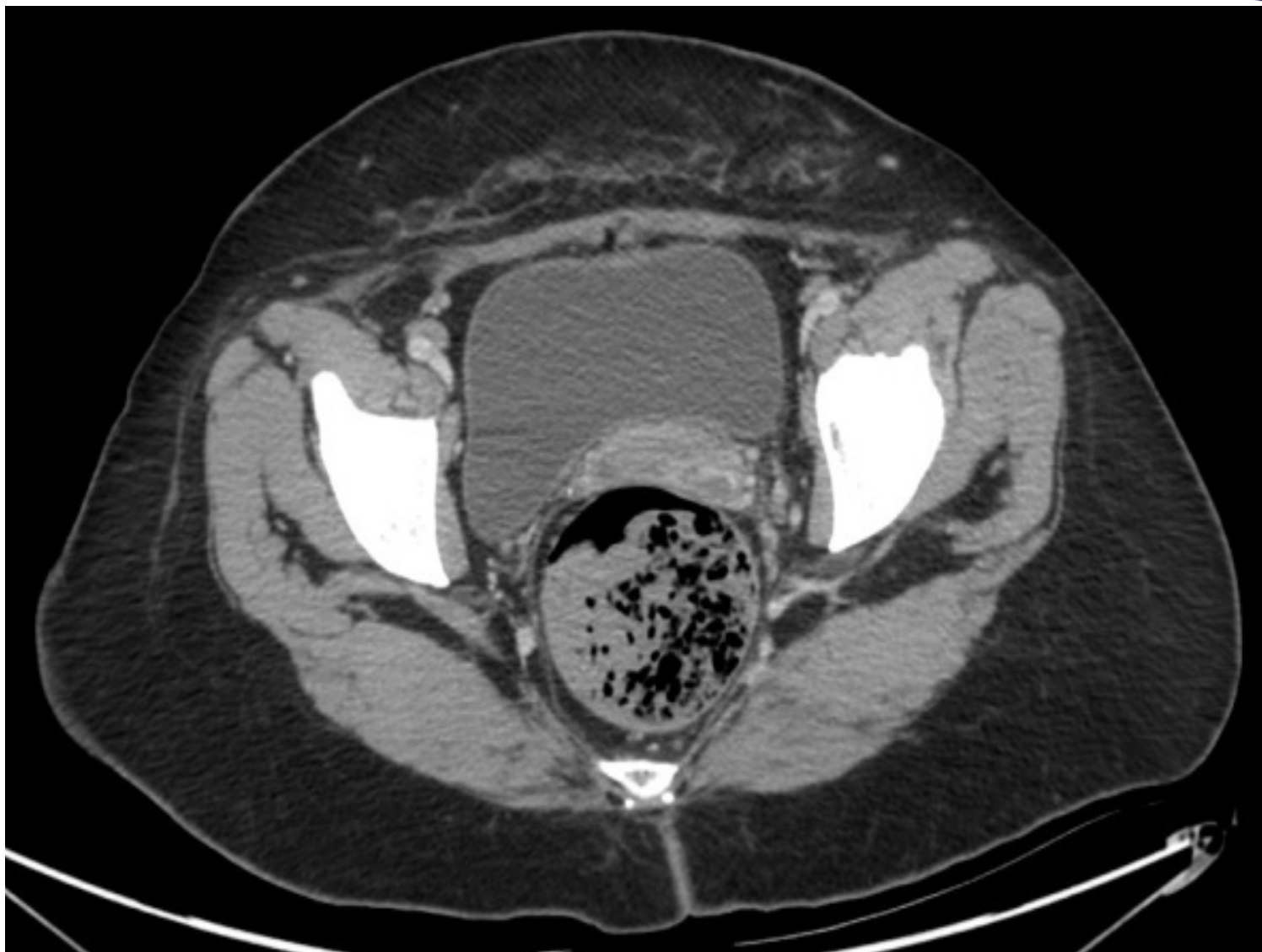
antero-mediale: ipogastriche, epigastriche, gonadiche e rettali superiori

laterale: ipogastriche, glutee e femorali

1 loop venoso

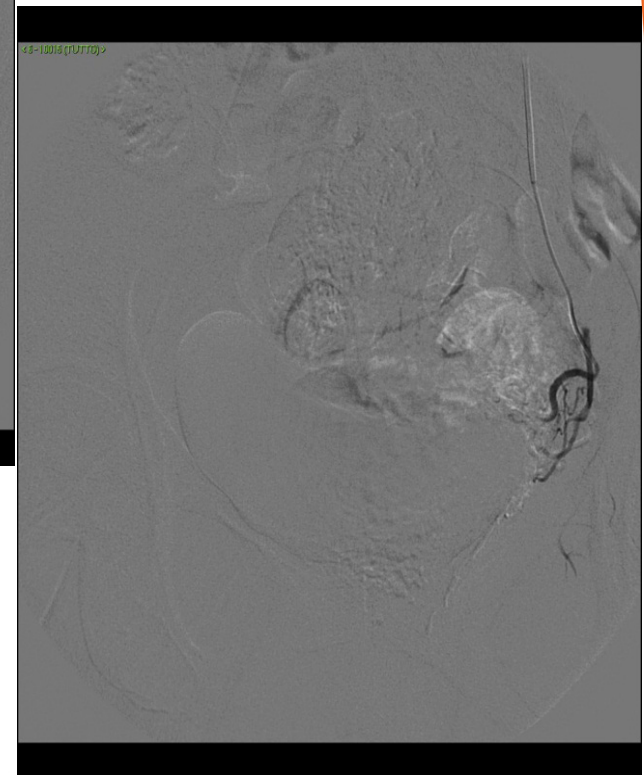
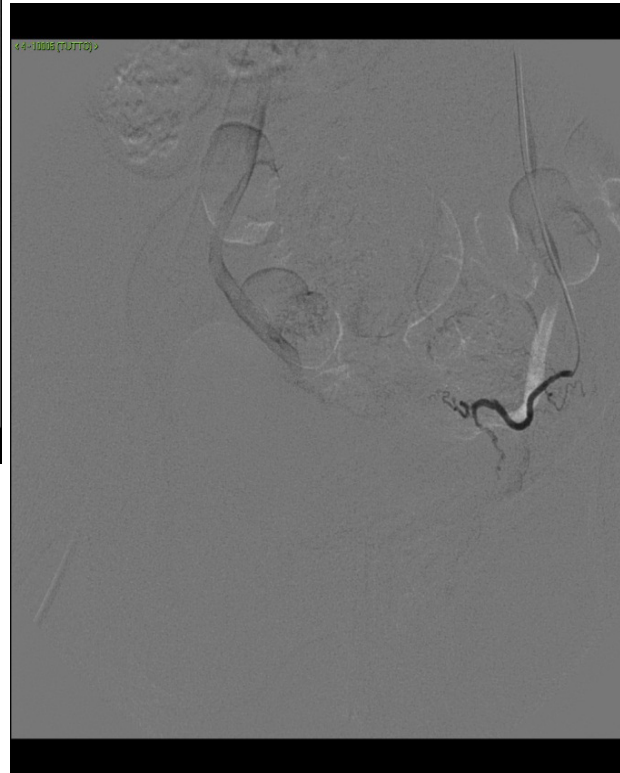
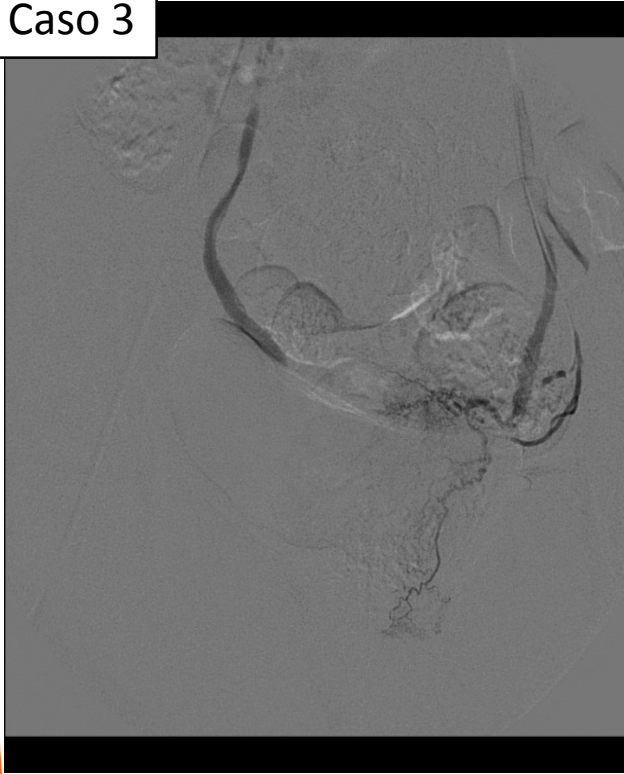
circolazione portale (non valvolata) e pelvi

38aa, seconda gravidanza, isterectomia; dopo 24h...



Caso 3

The dark side of the guidelines



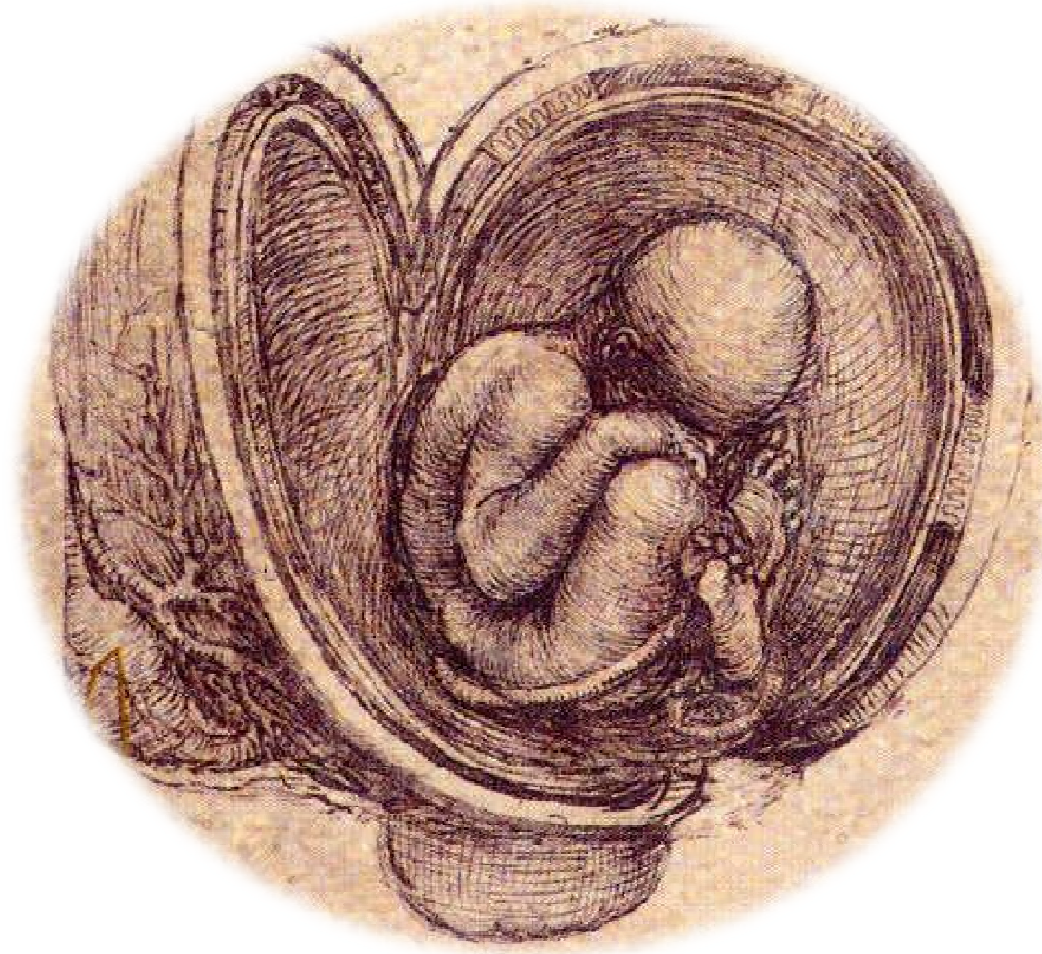
Ramo cervico-vaginale !!!

VASCULAR AND INTERVENTIONAL RADIOLOGY

Predelivery uterine arteries embolization in patients with placental implant anomalies: a cost-effective procedure

Raffaella Niola¹ · Francesco Giurazza²  · Aleksandra Torbica³ · Emiliano Schena⁴ · Mattia Silvestre¹ · Franco Maglione¹

Source	Preventive group (€)	Non-preventive group (€)	<i>p</i> value
Instrumental examinations	215,29	343,08	<0.05
Laboratories examination	251,08	720,62	<0.05
Specialistic consultations	0	58,45	<0.05
Medical devices	65,12	382,92	<0.05
Surgical interventions	1.129,48	1.765,89	=0.054
		Cost saving (6317€/Pz)	<0.05 <0.05



Grazie per l'attenzione

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