AIP:
du diagnostic à la prise en charge péri-partale

Frederic Chantraine

CHU de Liège

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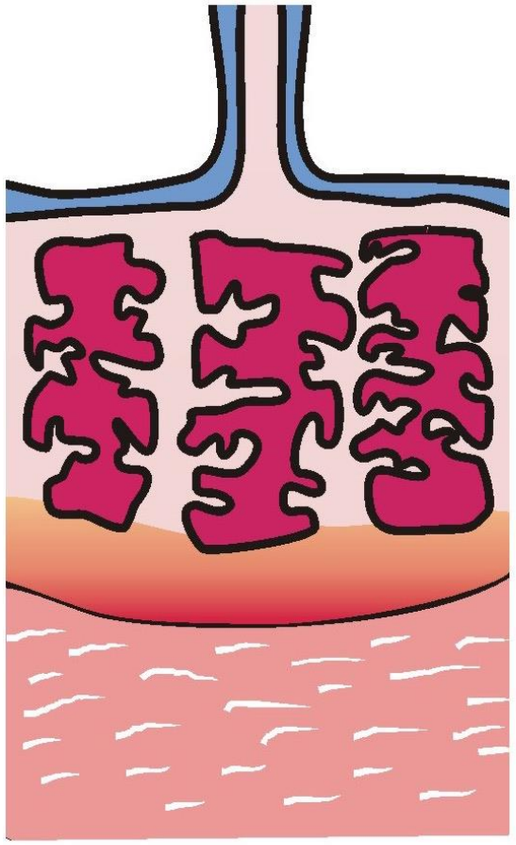
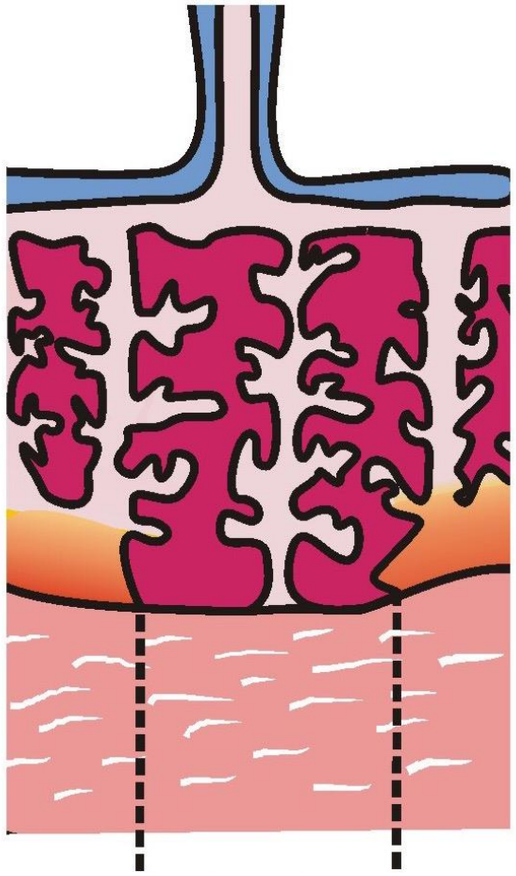
Placenta

Decidua

Myom.

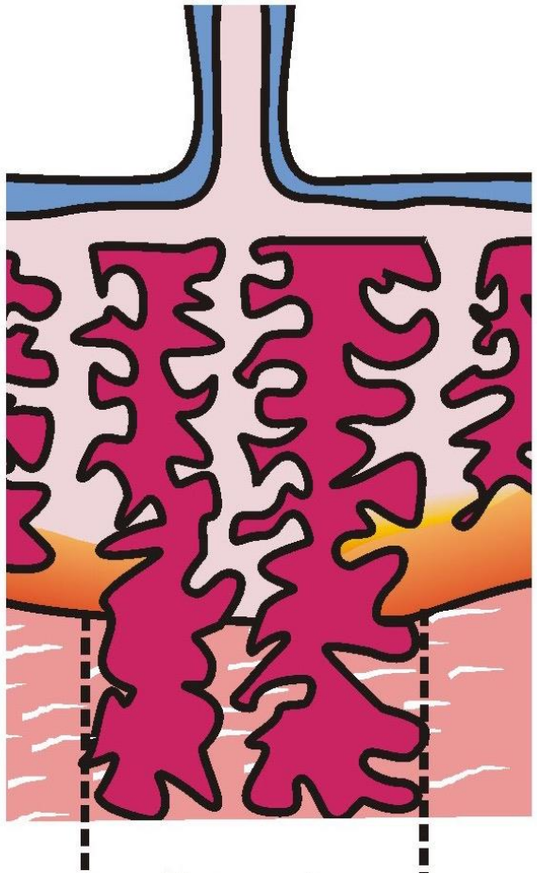


Normal

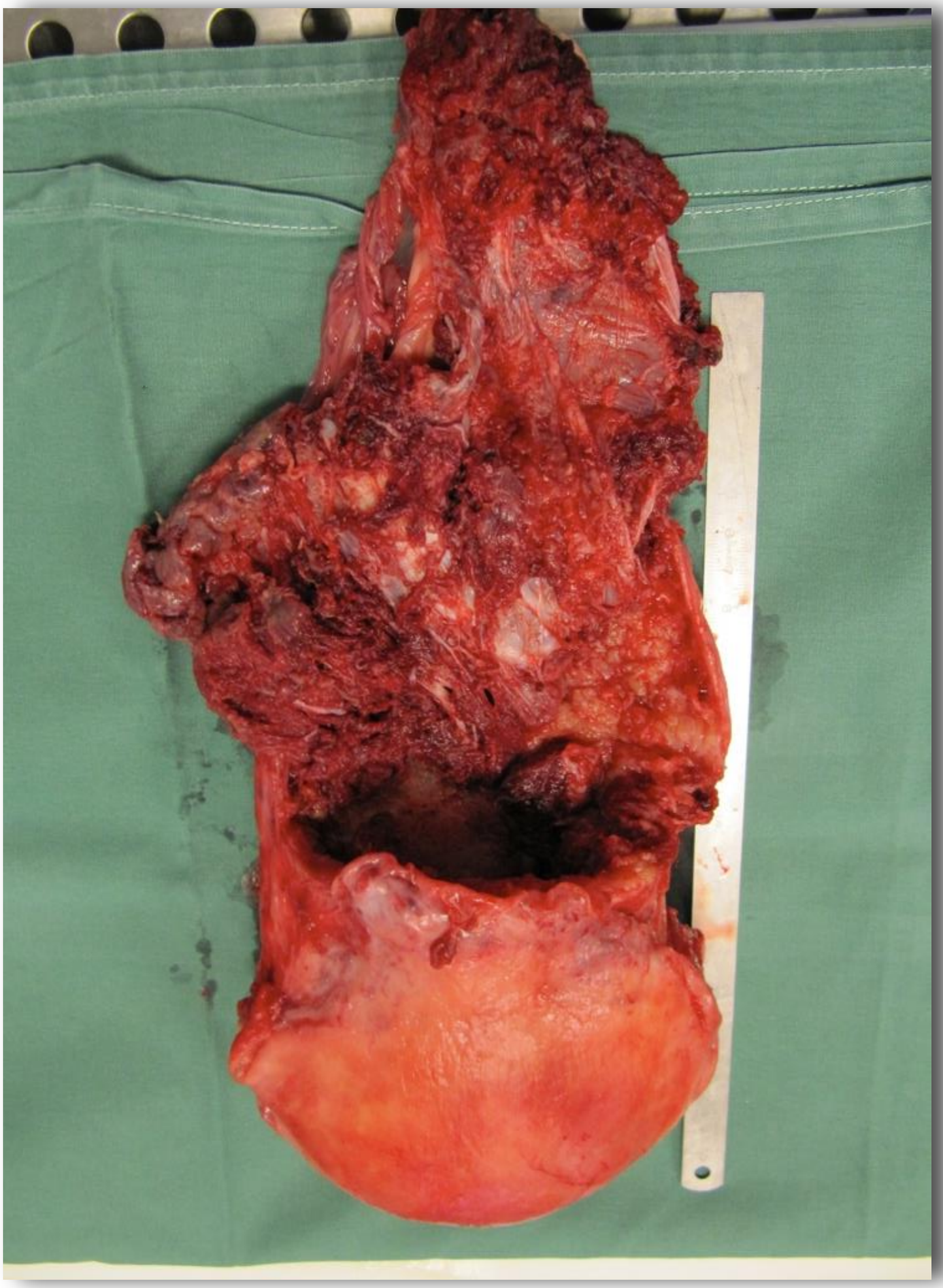


Accreta

Increta



Percreta



Facteurs de risque

Facteurs de risque

- Histoire de chirurgie utérine
- Autres:
  - âge maternel > 35 ans
  - multiparité
  - defect de l’endomètre
  - myomes sous-muqueux

placenta praevia

après une première

césarienne

Risque d'AIP

sans pl praevia

- 1 césarienne antérieure: 0,3%
- 2 césariennes antérieures: 0,6 %
- >= 3 césariennes antérieures: 2,4%

Clark Obstet Gynecol 1985
Miller Am J Obstet Gynecol 1997

Risque d'AIP

en cas d'un pl praevia

- utérus sans cicatrice: 1-5%
- 1 césarienne antérieure: 11-25%
- 2 césariennes antérieures: 35-47%
- 3 césariennes antérieures: 40%
- >= 4 césariennes antérieures: 50-67%

Clark Obstet Gynecol 1985
Miller Am J Obstet Gynecol 1997

The Journal of Maternal-Fetal and Neonatal Medicine, 2011;

The effect of cesarean delivery rates on the future incidence of placenta previa, placenta accreta, and maternal mortality

KARLA N. SOLHEIM[1], TANIA F. ESAKOFF[2], SARAH E. LITTLE[3], YVONNE W. CHENG[4], TERESA N. SPARKS[3], & AARON B. CAUGHEY[5]

Si le taux de césarienne évolue comme maintenant:

- en 2020: le taux de césarienne sera de 56%
- par an, en plus:
  - 6236 placenta praevia
  - 4504 placenta accreta
  - 130 morts maternels

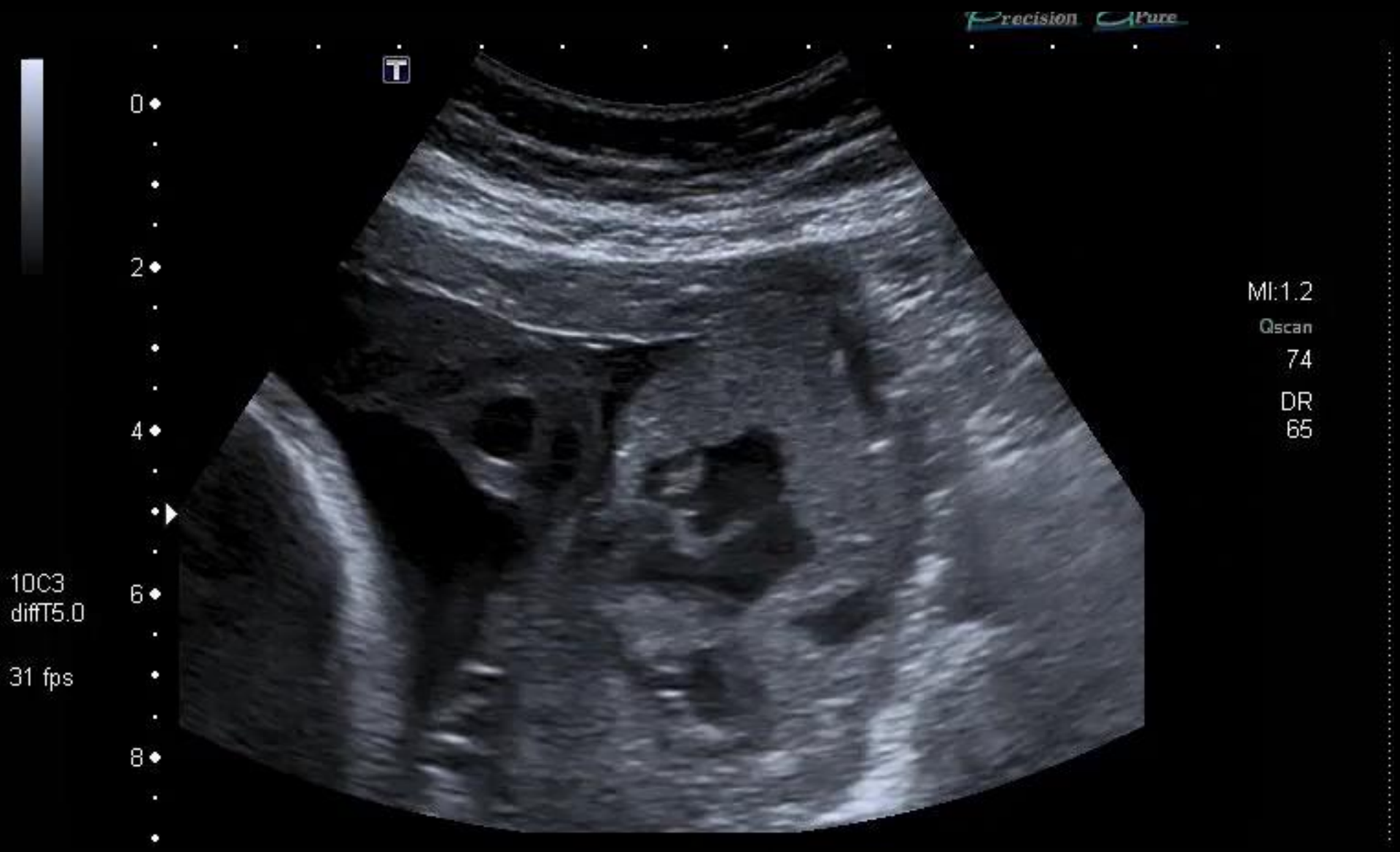
Dépistage

Comment dépister l'AIP?

- Exploration systématique du placenta par échographie chez:
  - chaque patiente
  - **histoire de chirurgie utérine**
  - **histoire de césarienne**
- En cas de suspicion d'AIP = 2ème avis

Echographie

- transabdominal & transvaginal & vessie remplis
- Signes échographies classiques:
  - Lacunes placentaires
  - Myomètre rétroplacentaire très fin
  - Perte de la ligne hypoéchogène rétroplacentaire
  - Masse exophytique focale faisant protrusion dans la vessie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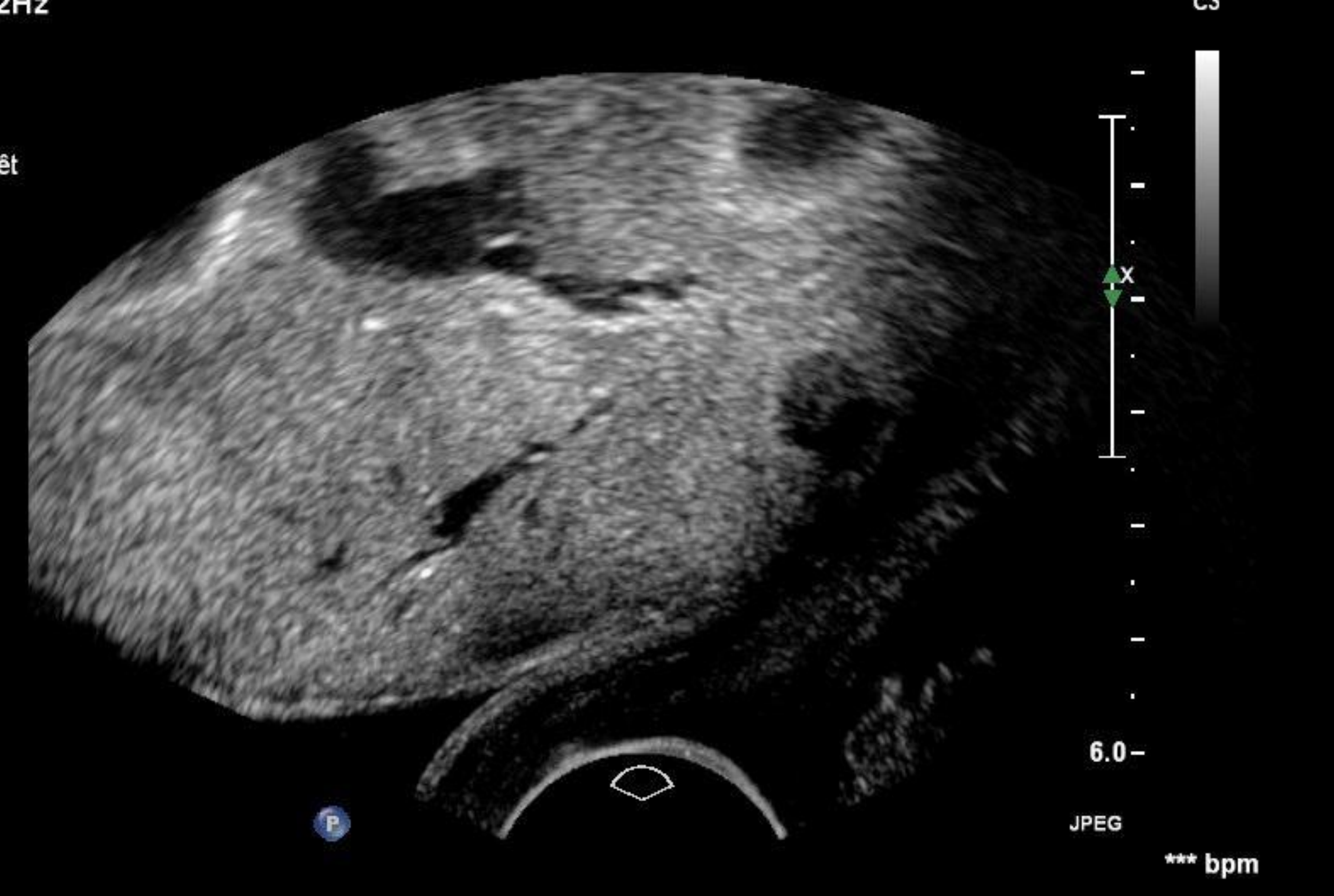
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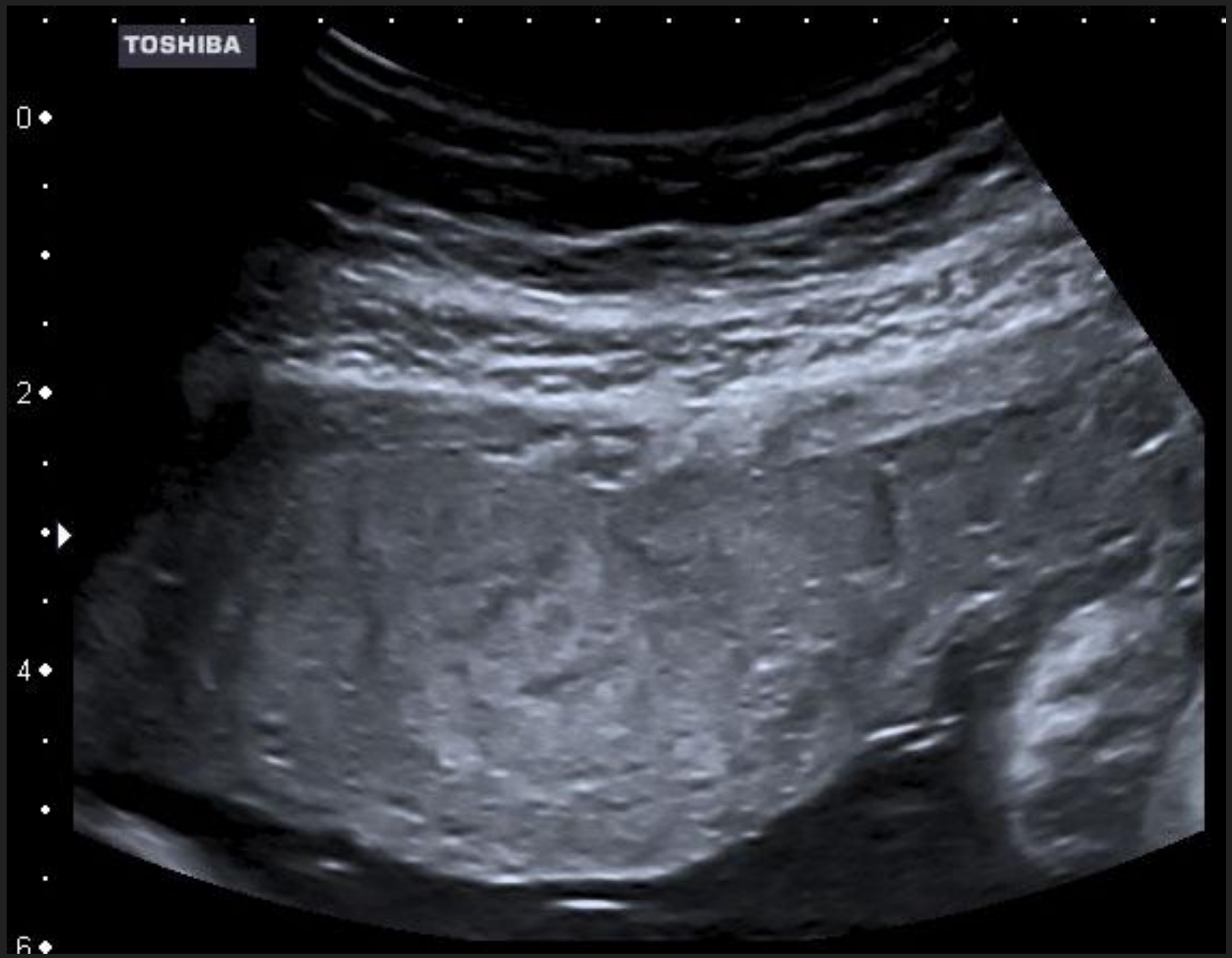

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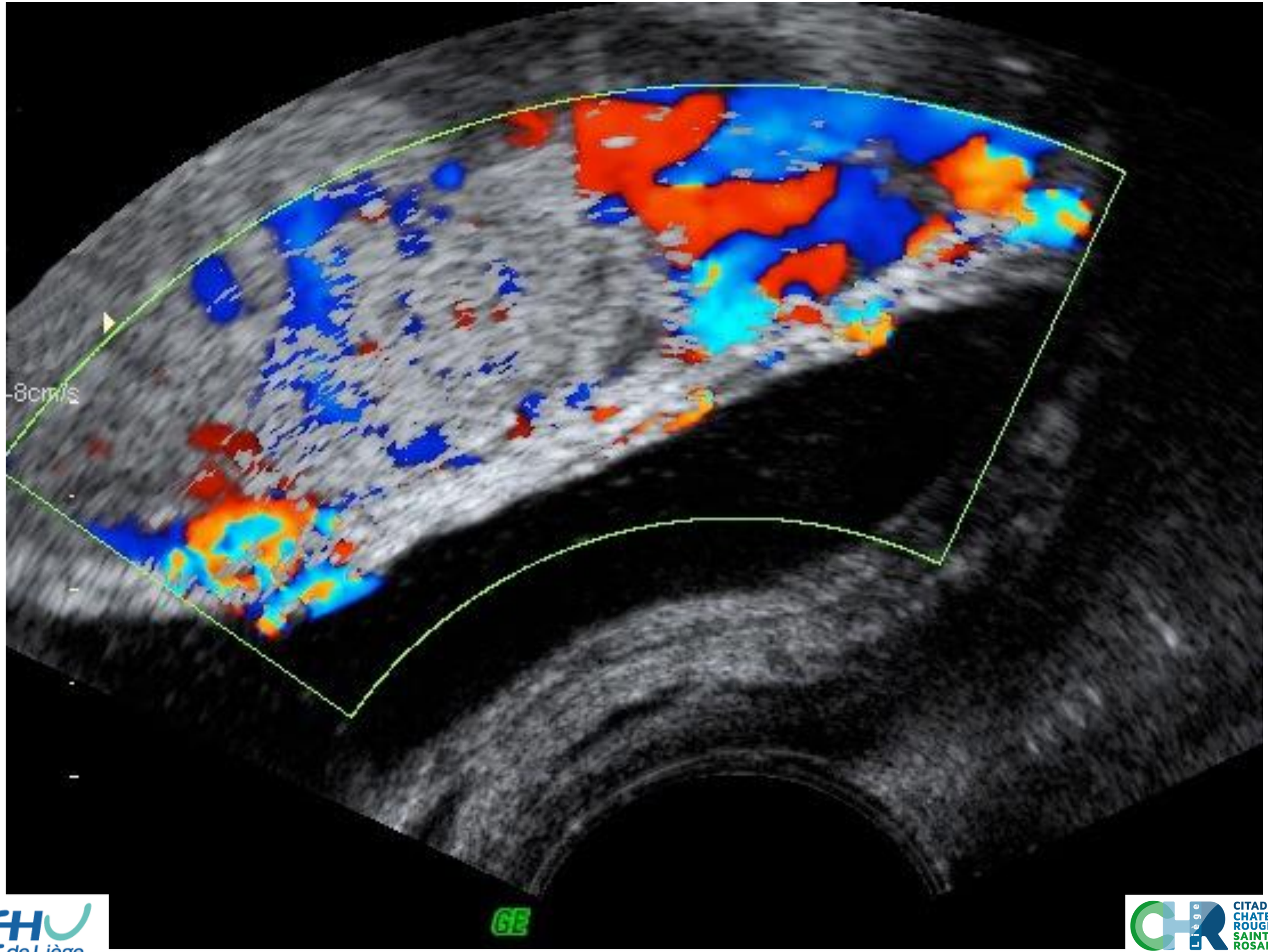
Echographie

- Informations complémentaires par:
  - Color-Doppler
  - 3D-Power-Doppler



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Echographie

- Echographie 2D dans une population à haut risque:
  - Sensibilité: 90,7% (95% CI 87,2-93,6)
  - Specificité: 96,9% (95% CI 96,3-97,5)
  - +LR: 11 (95% CI 6-20)
  - -LR: 0,16 (95% CI 0,11-0,23)

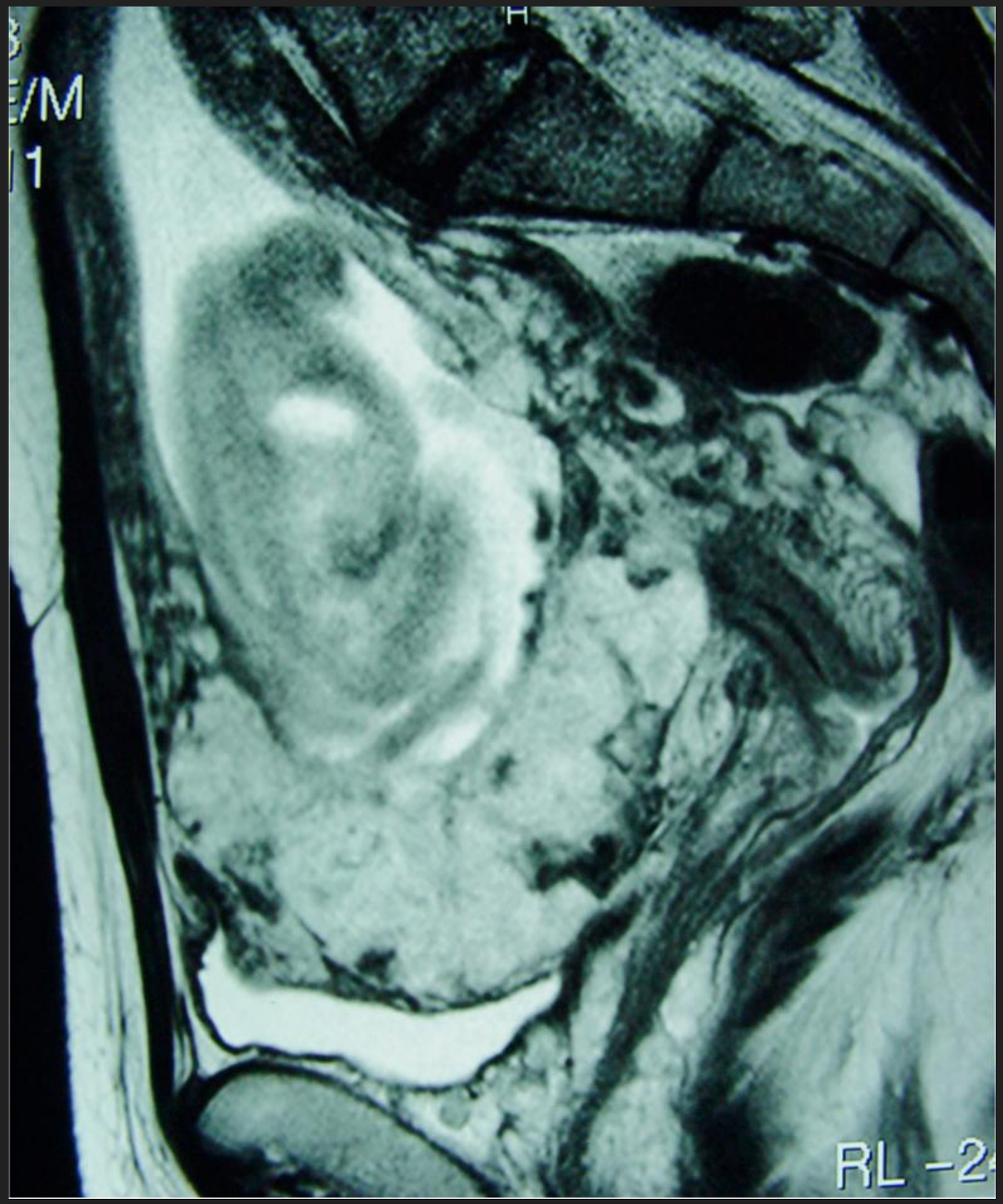
D'Antonio et al, UOG, 2013

IRM

- additionnel à l’échographie
- si l’échographie est insuffisante
- plan axiale: invasion des paramètres

IRM

- signes principales:
  - « bulging » utérin
  - Hétérogénicité intra-placentaire
  - « dark bands » intraplacentaires sur les images T2
  - Interruption focale du myomètre
  - Invasion de la vessie


H
E/M
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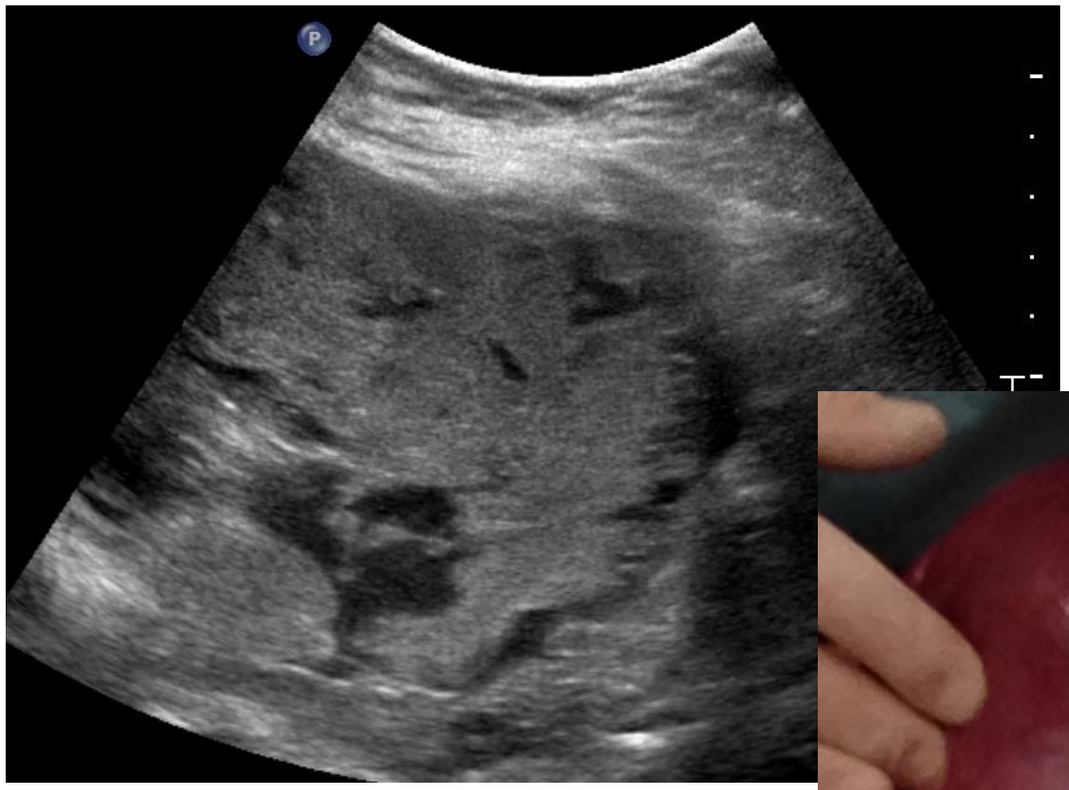
IRM

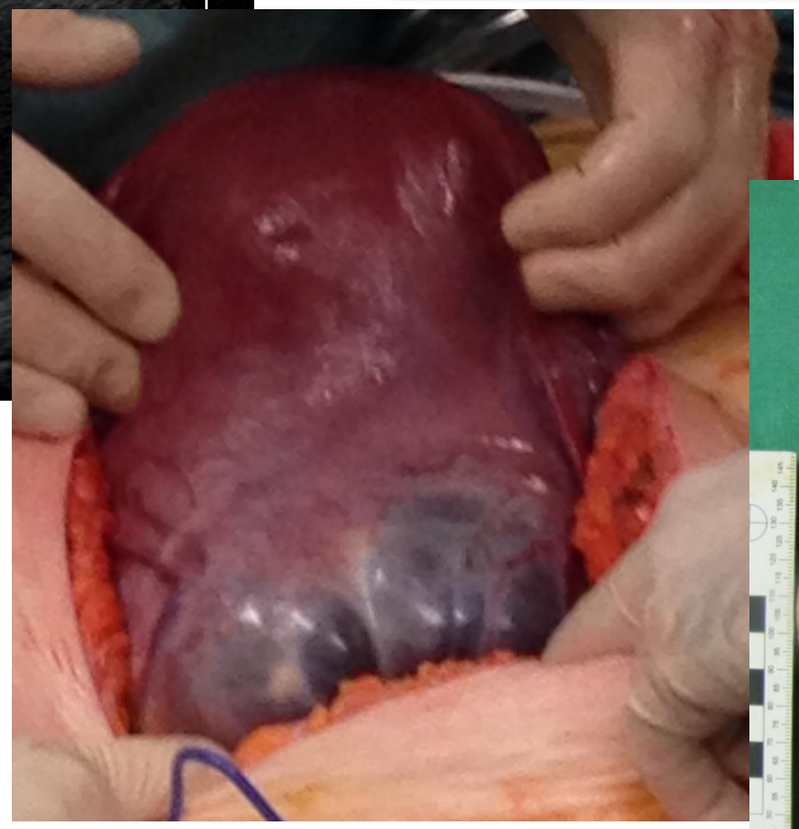
- IRM dans une population à haut risque:
  - Sensibilité: 94,4% (95% CI 86-97,7)
  - Specificité: 84% (95% CI 76-89,8)
  - +LR: 5,91 (95% CI 3,73-9,39)
  - -LR: 0,07 (95% CI 0,02-0,18)

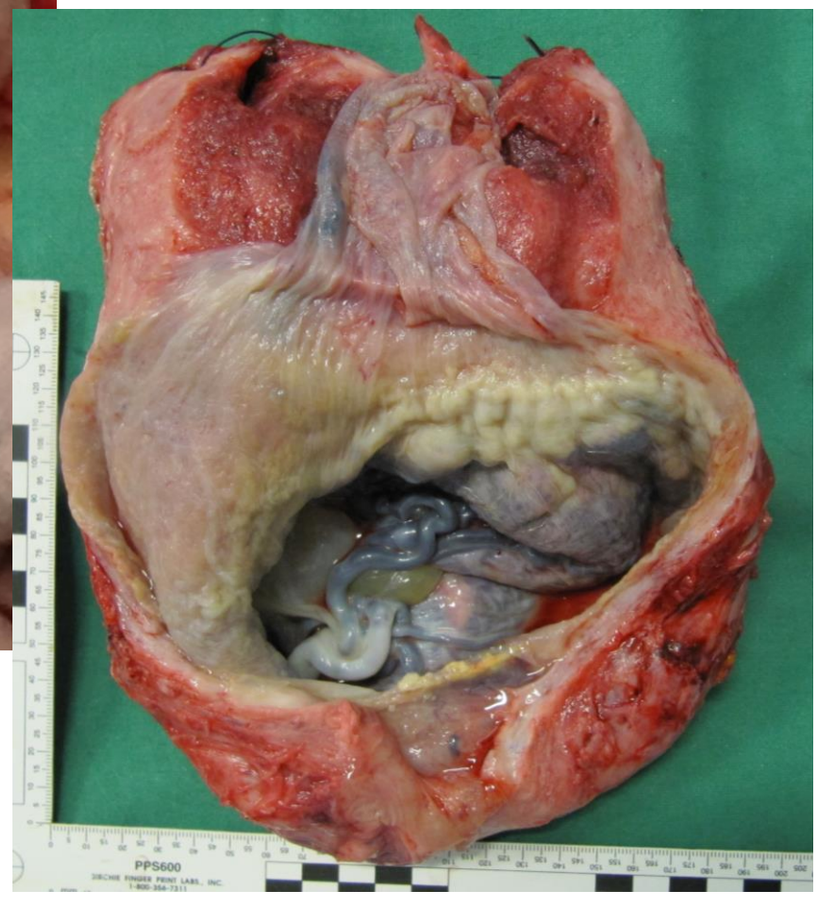
D'Antonio et al, UOG, 2014

Et en pratique?

Placenta accreta

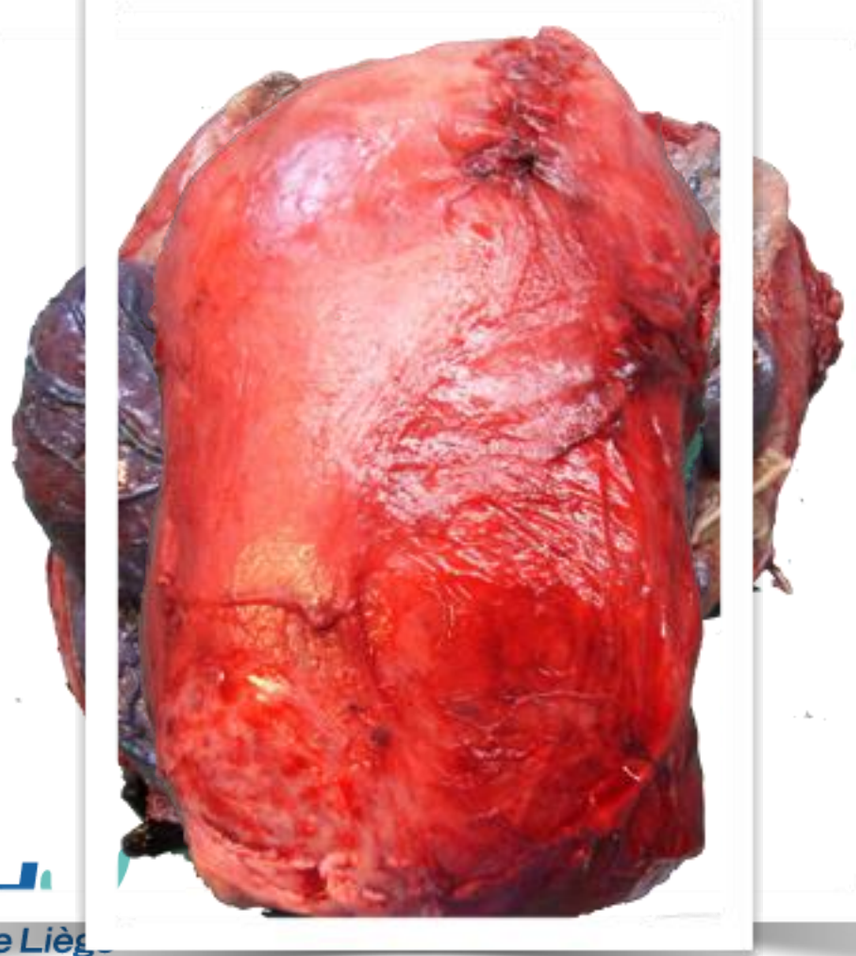




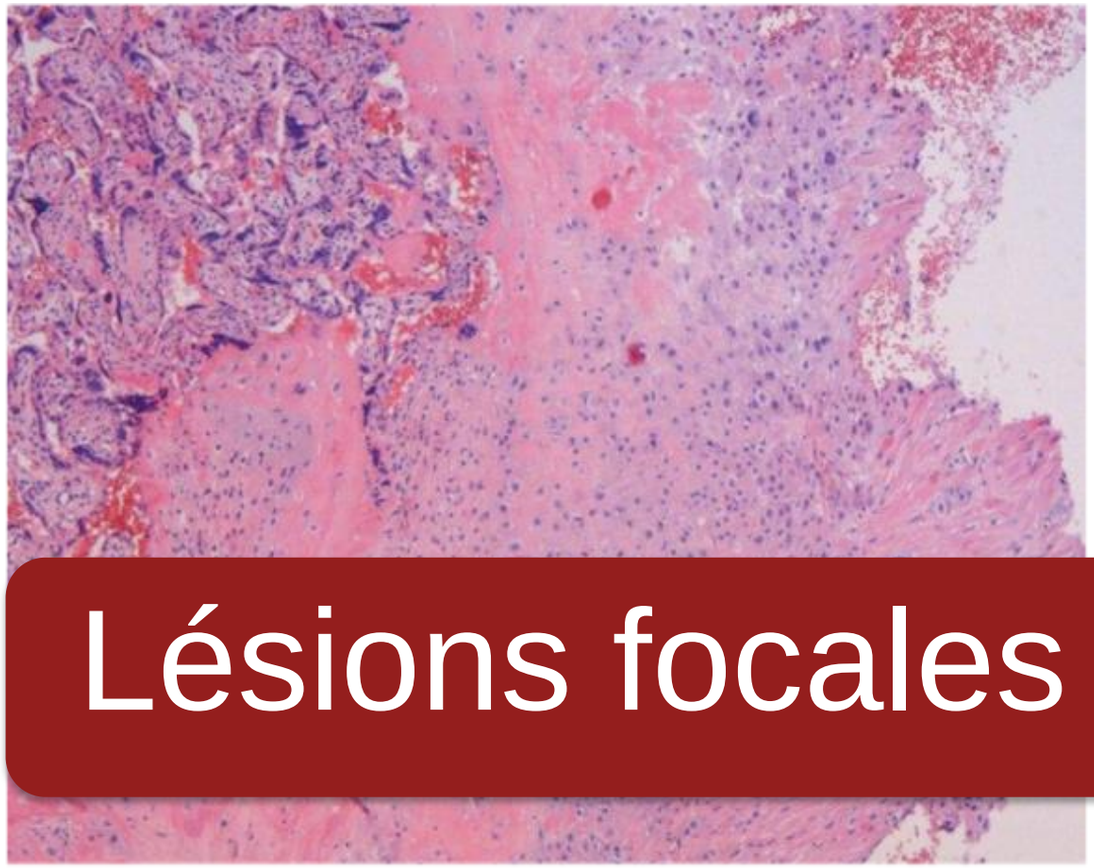


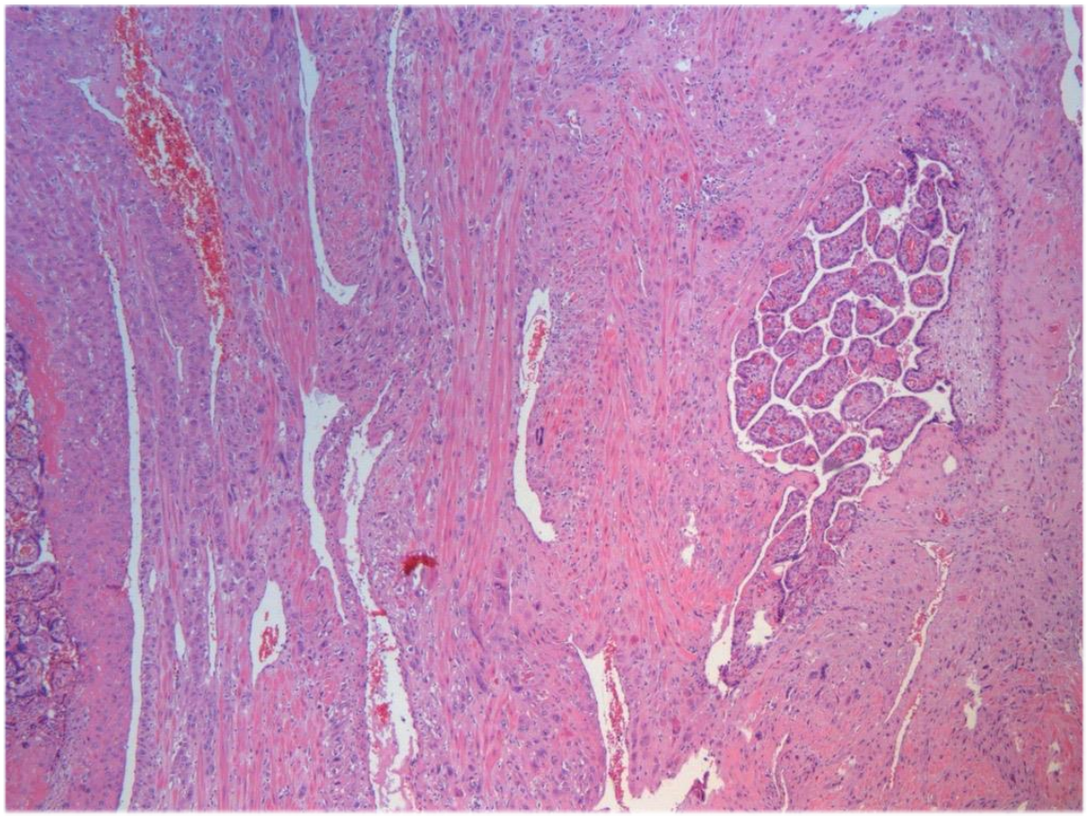
La même classification pour:

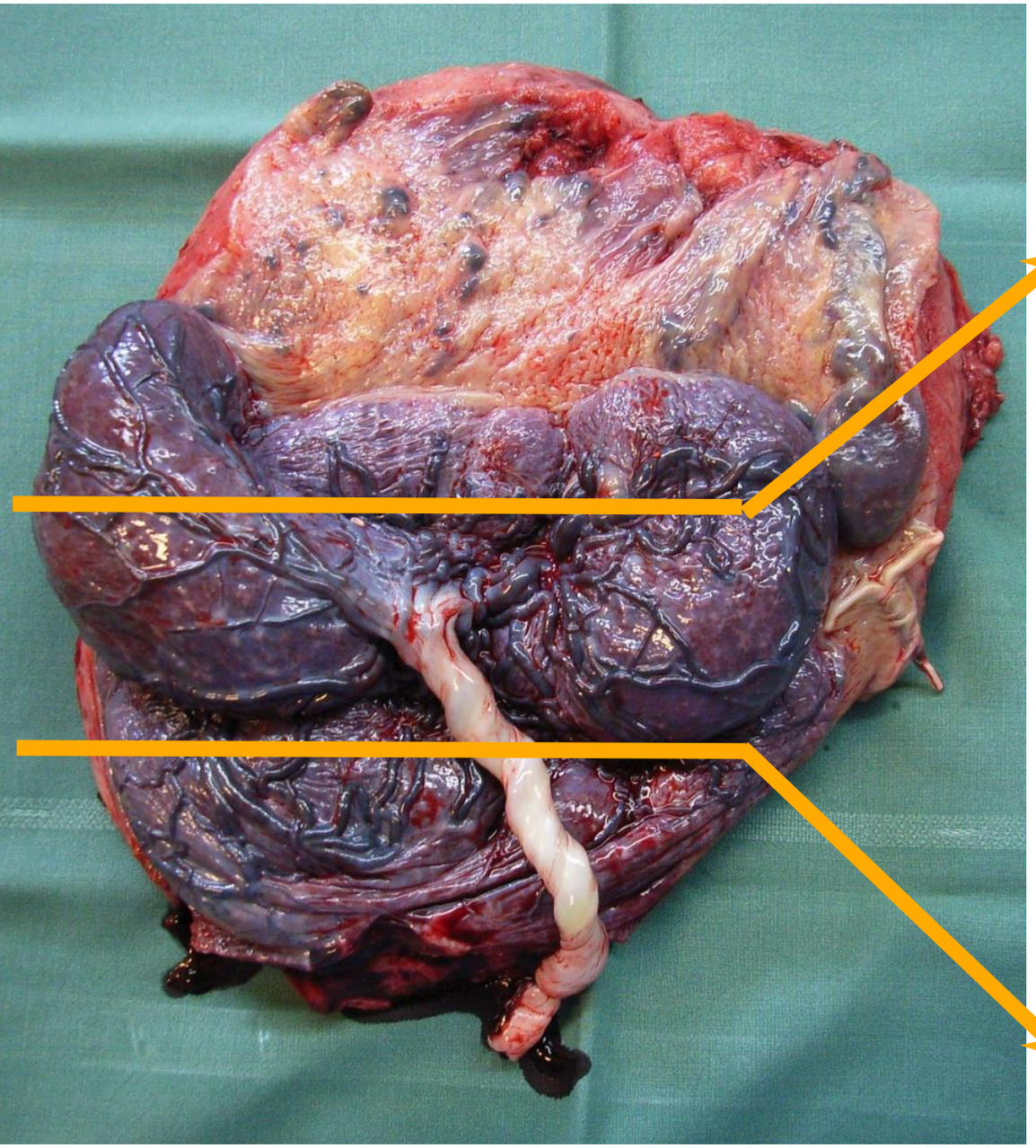
- soins anténataux
- gestion péri-partale
- examen post-postpartal

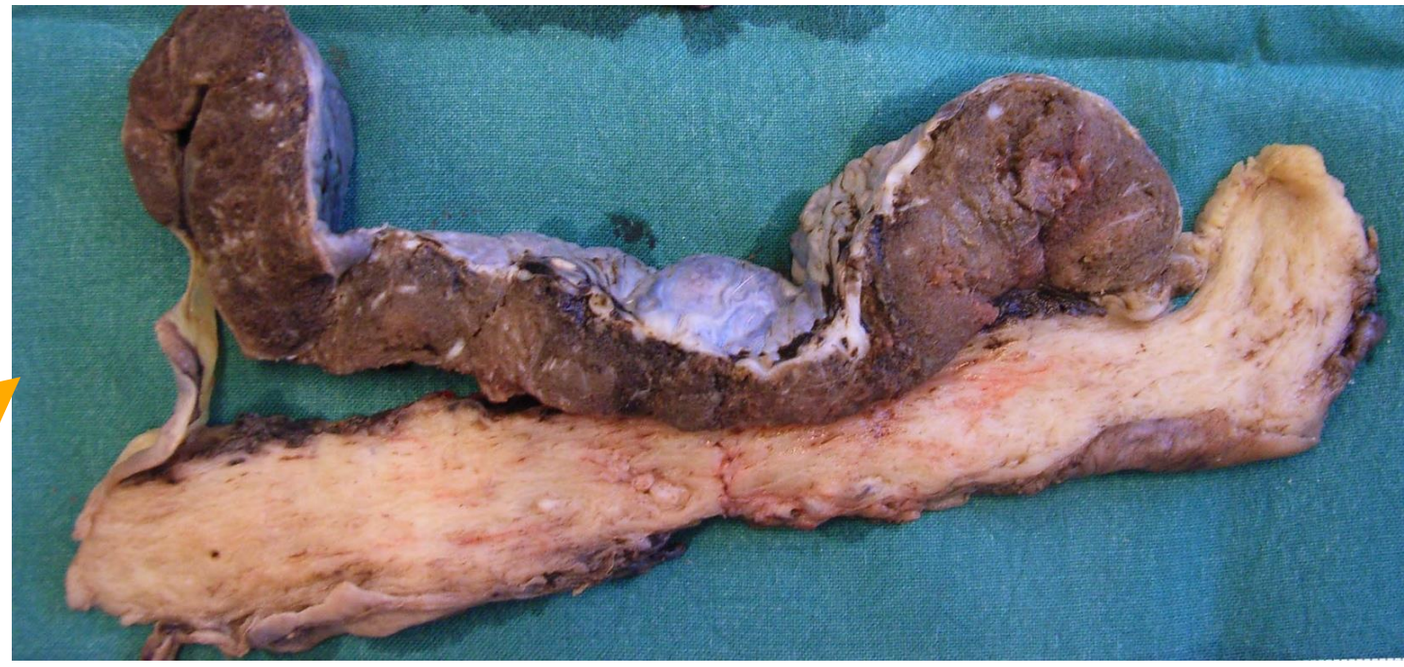


Lésions focales

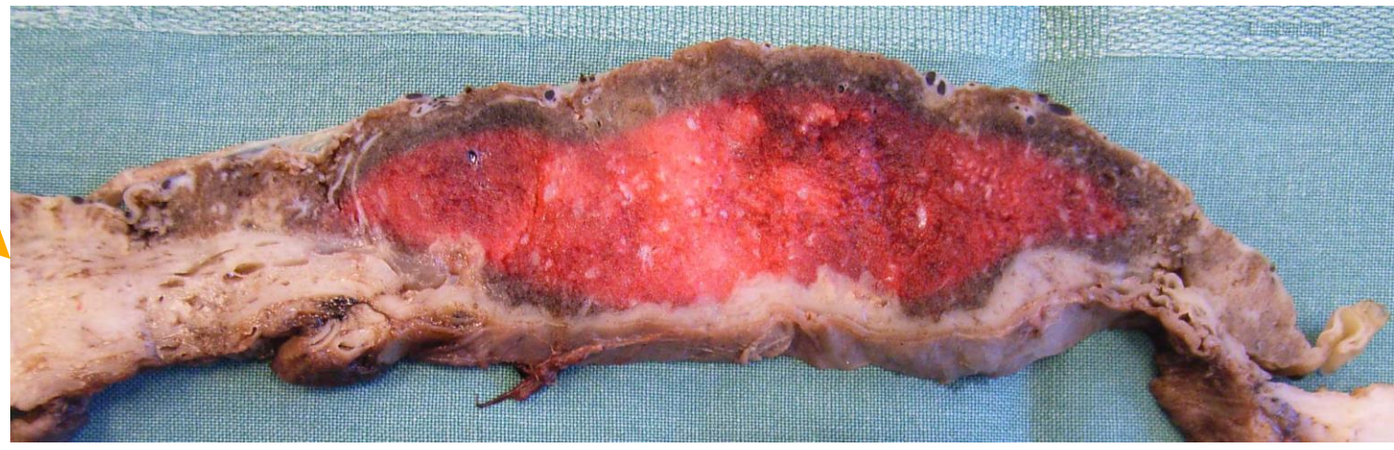


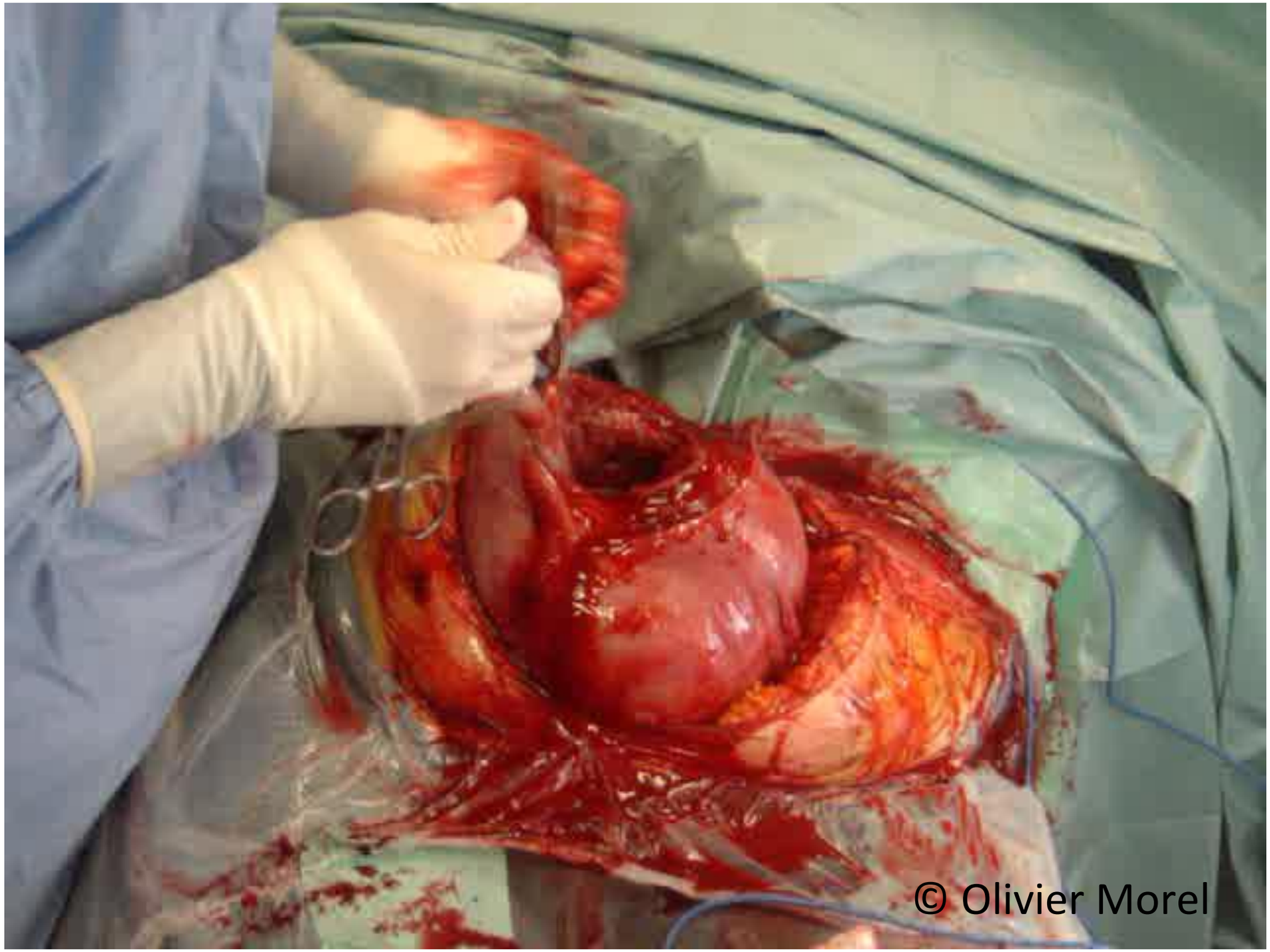




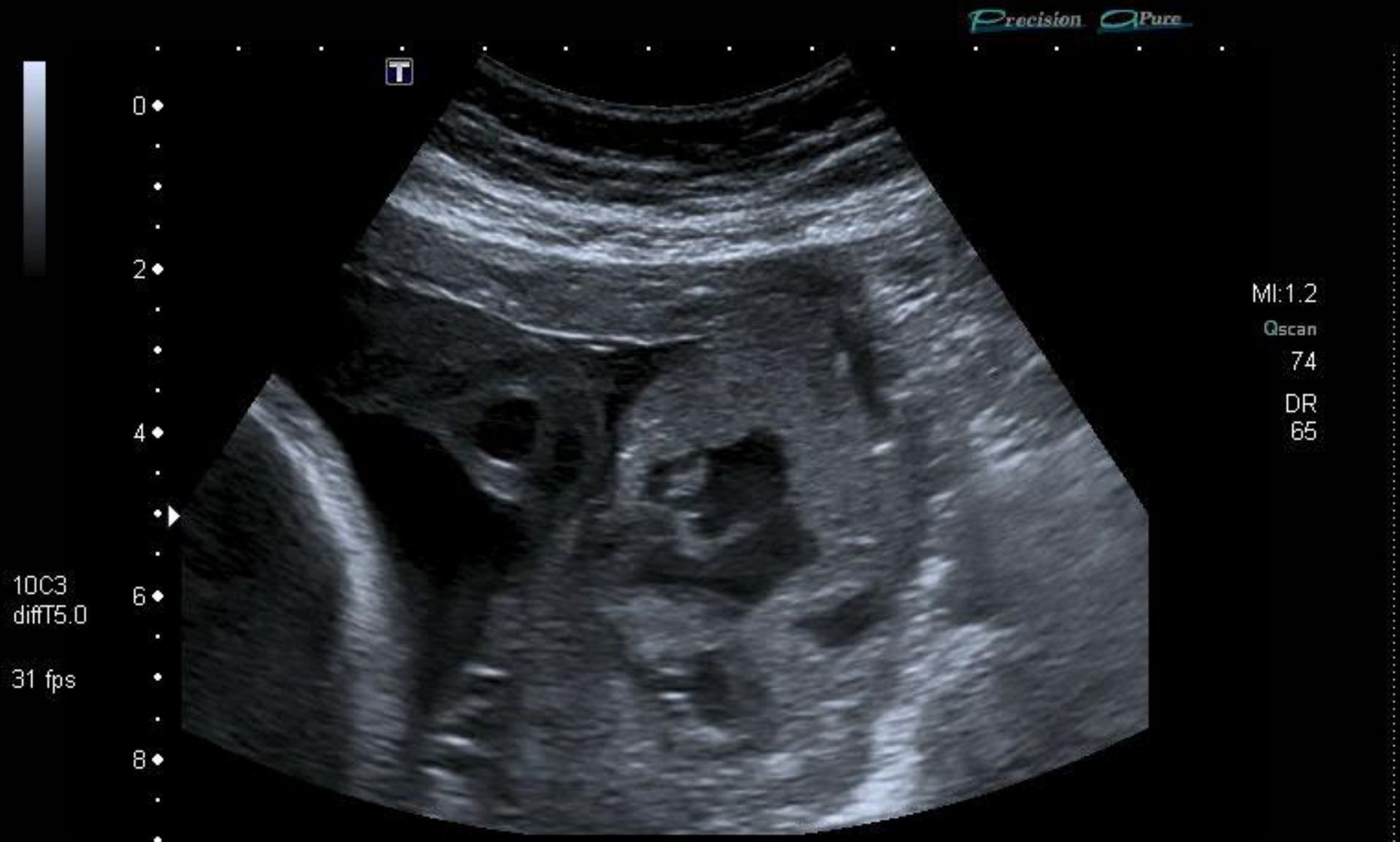


Lésions partielles





Faux positifs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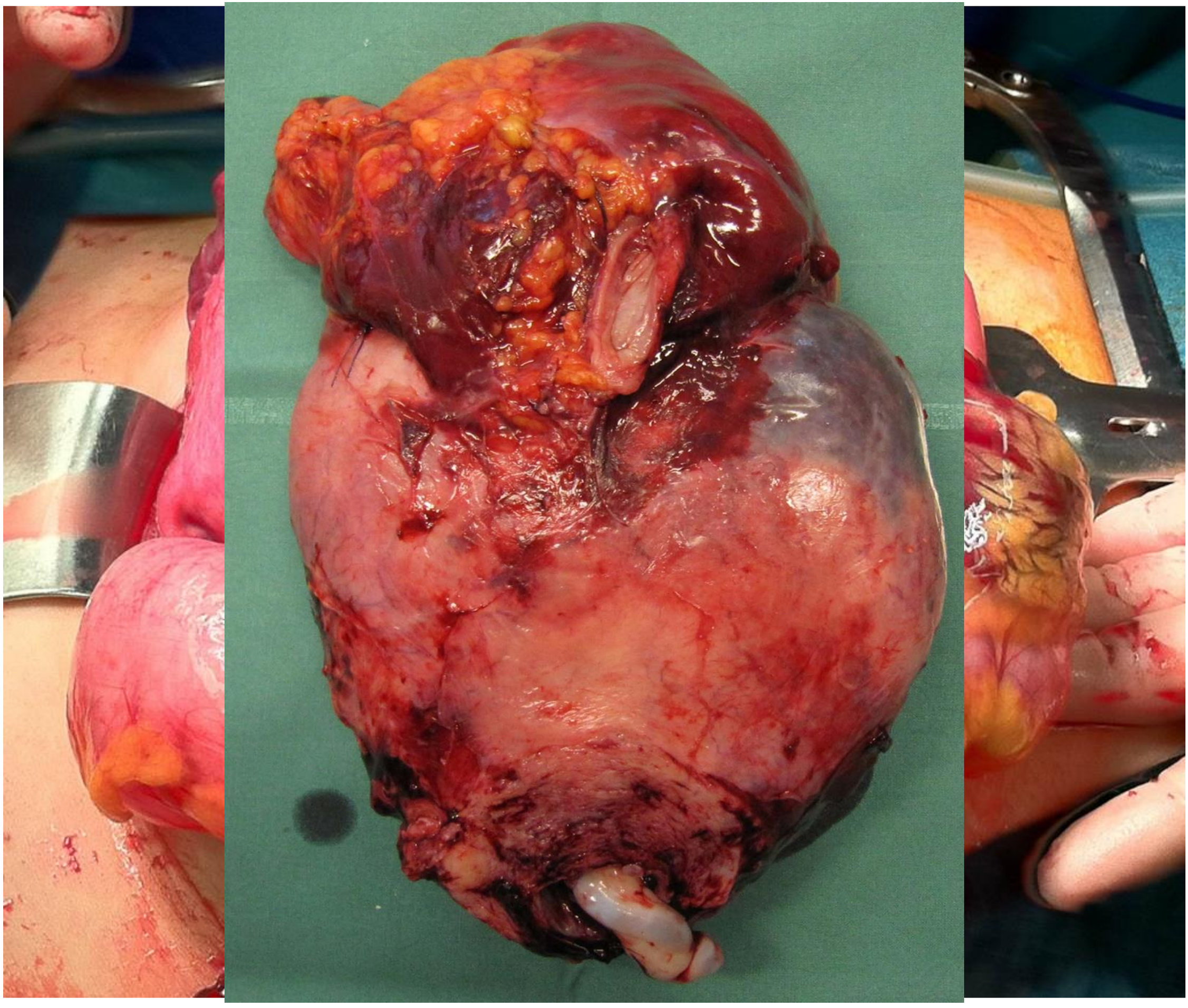

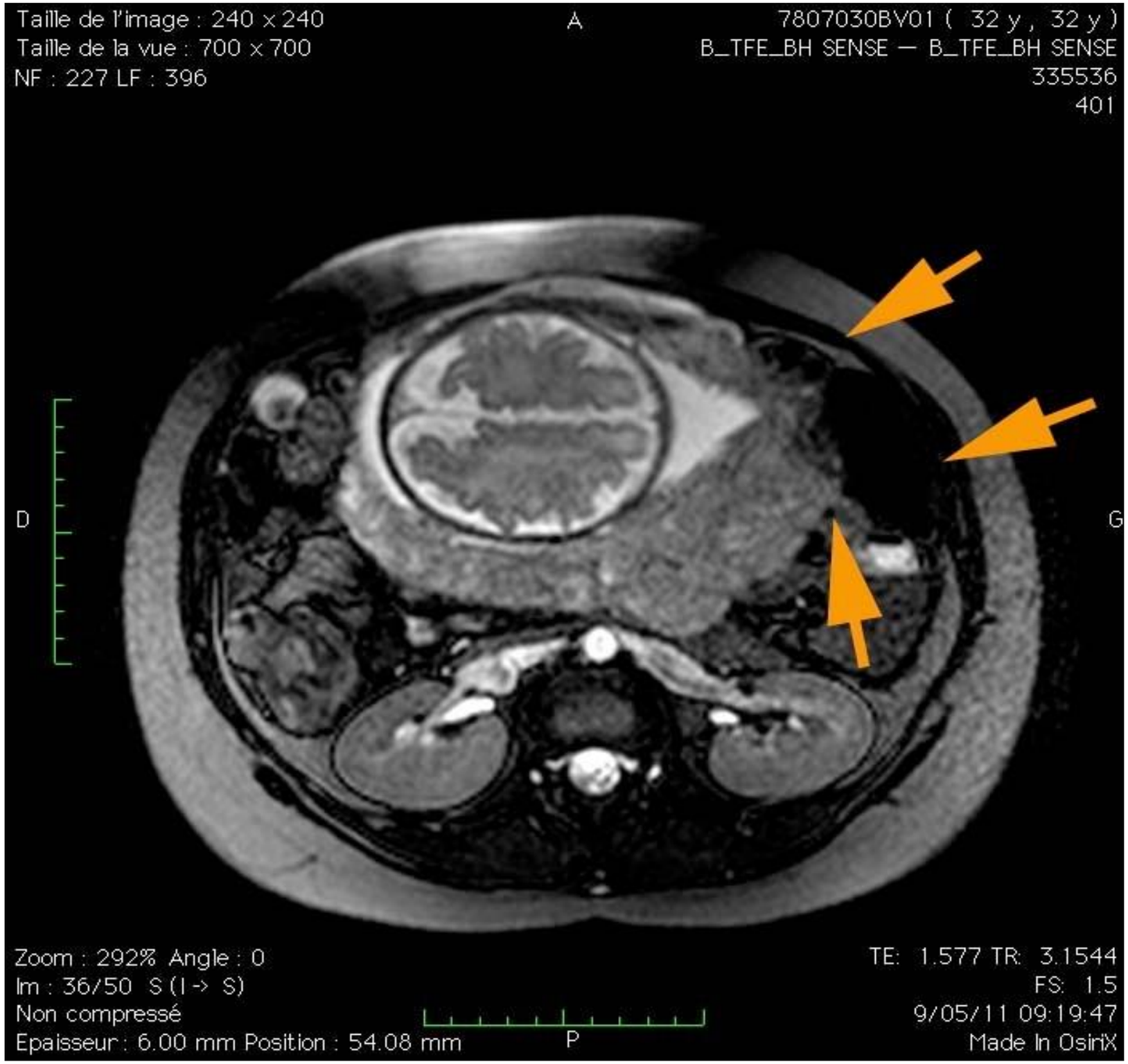

Diagnostic prénatal incomplet

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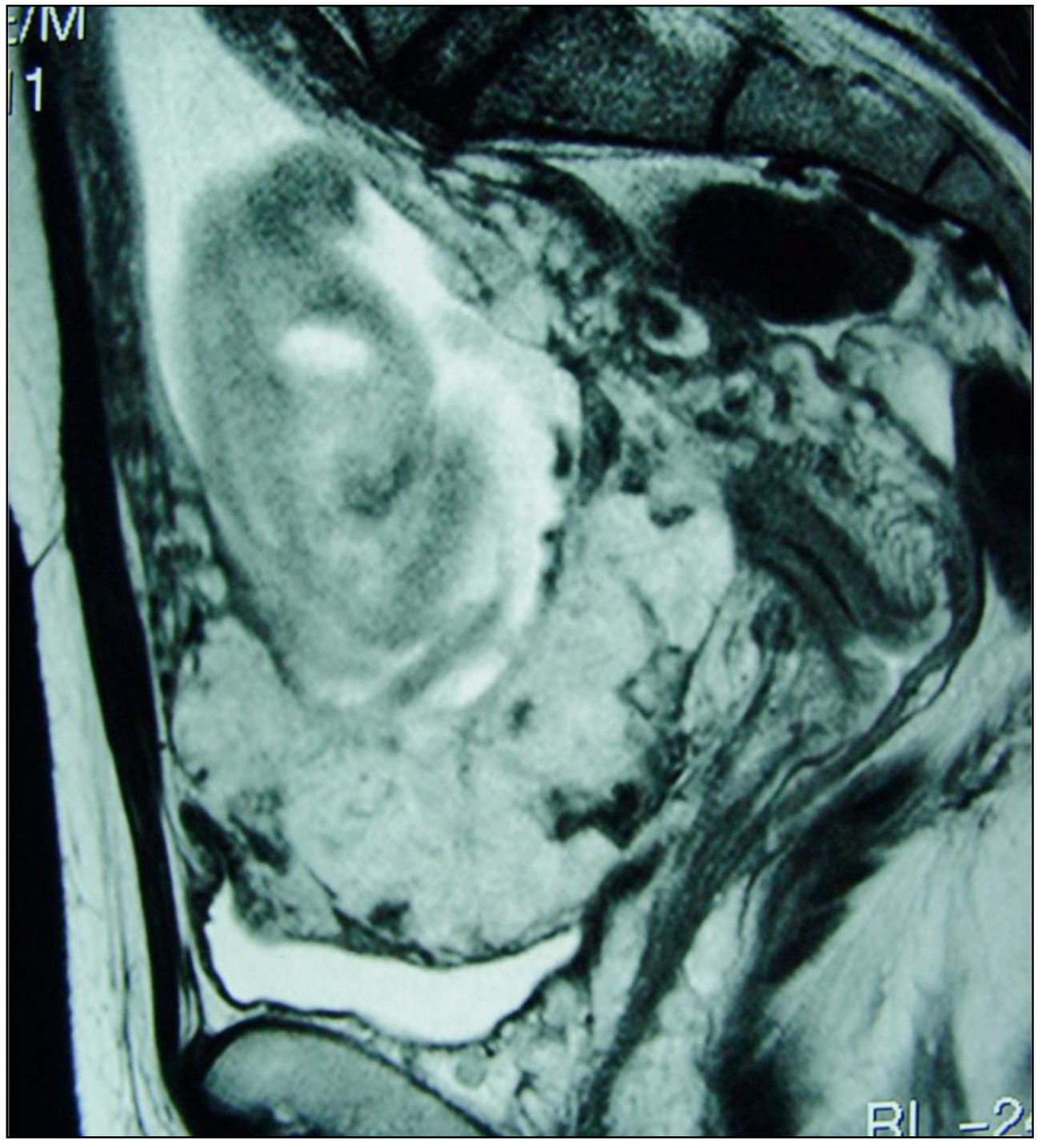
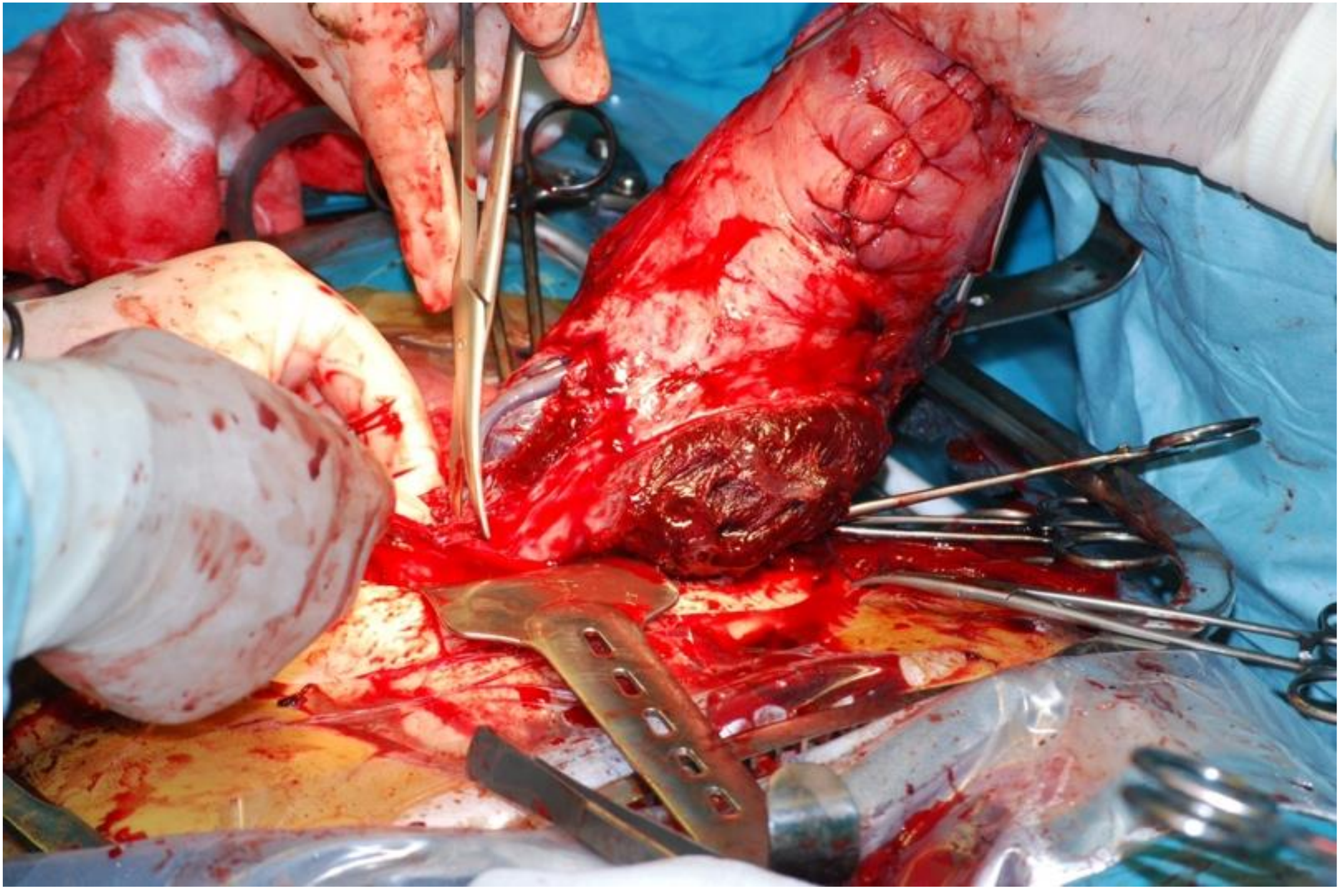


IRM « gold standard »?



Chirurgie difficile

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Prise en charge péri-partale

AIP au «CHR Citadelle»

- Discussion en équipe et avec la patiente
- Décision dépend de:
  - Infiltration du myométre
  - Parité
  - Desire de garde la fertilité

Cesarienne-Hysterectomie

Placenta in situ

Réparation utérine

Placenta in situ

Placenta in situ

- éviter l’embolisation élective
- pas de methotrexate
- Risque de saignement et d’infection
- Expulsion/Resorption peut prendre des mois

Résection élective

Acta Obstet Gynecol Scand 2004: 83: 738–744
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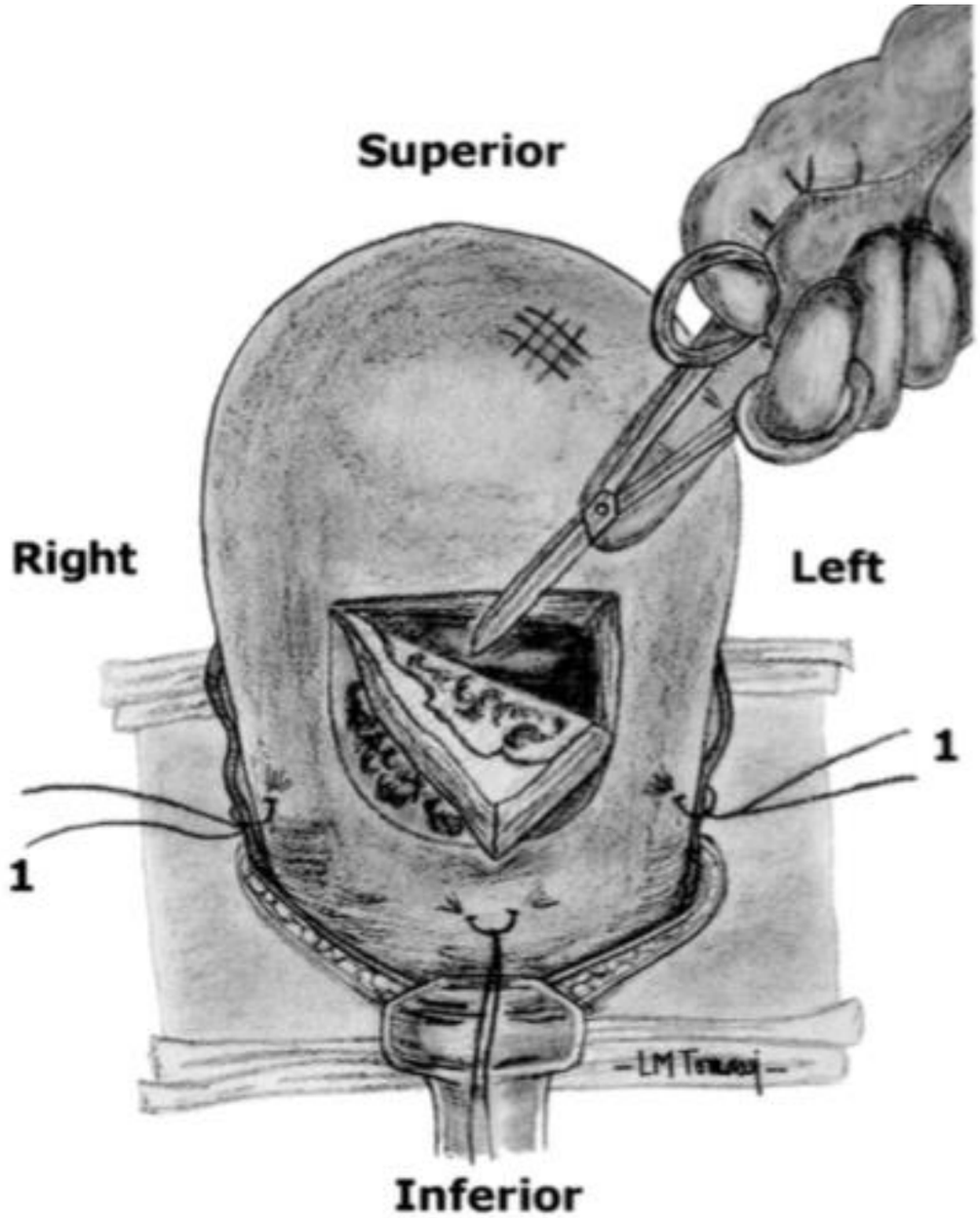
Acta Obstetricia et Gynecologica Scandinavica

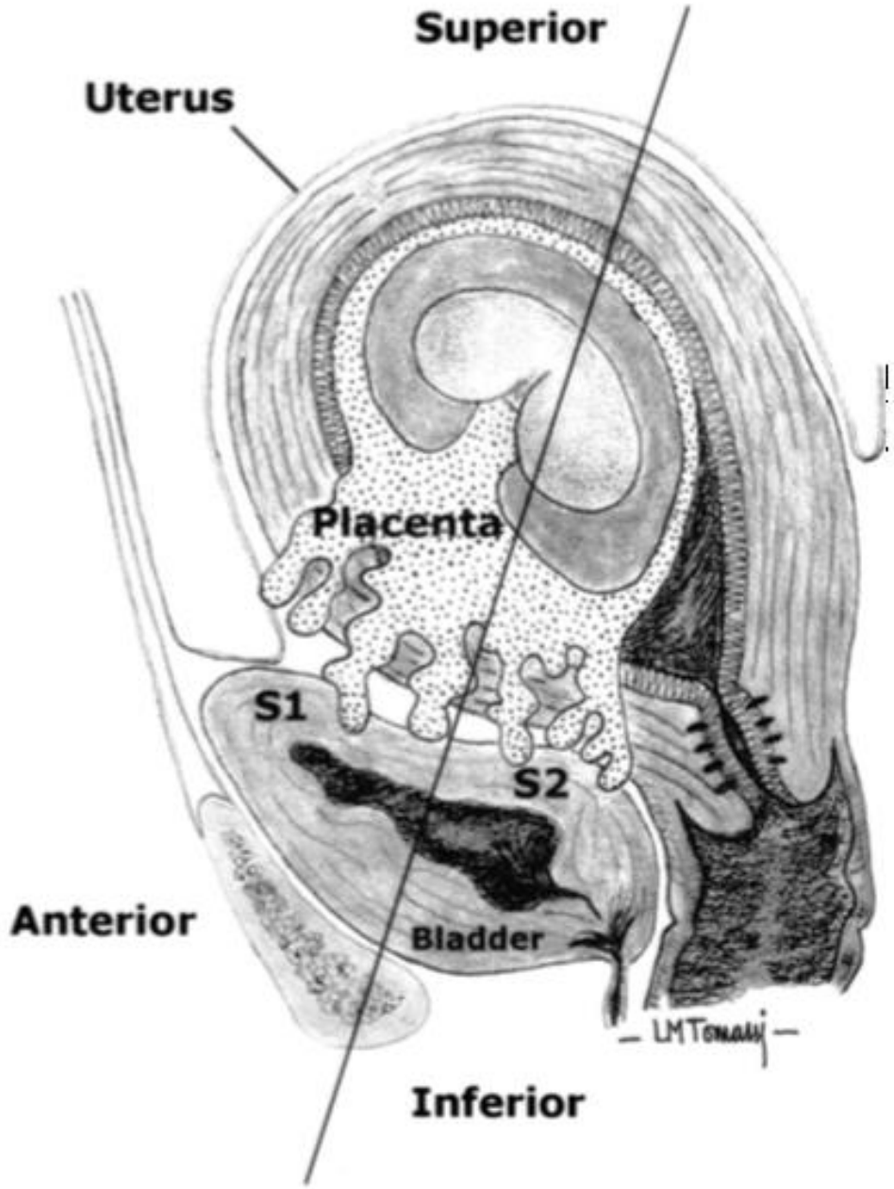
ORIGINAL ARTICLE

Anterior placenta percreta: surgical approach, hemostasis and uterine repair

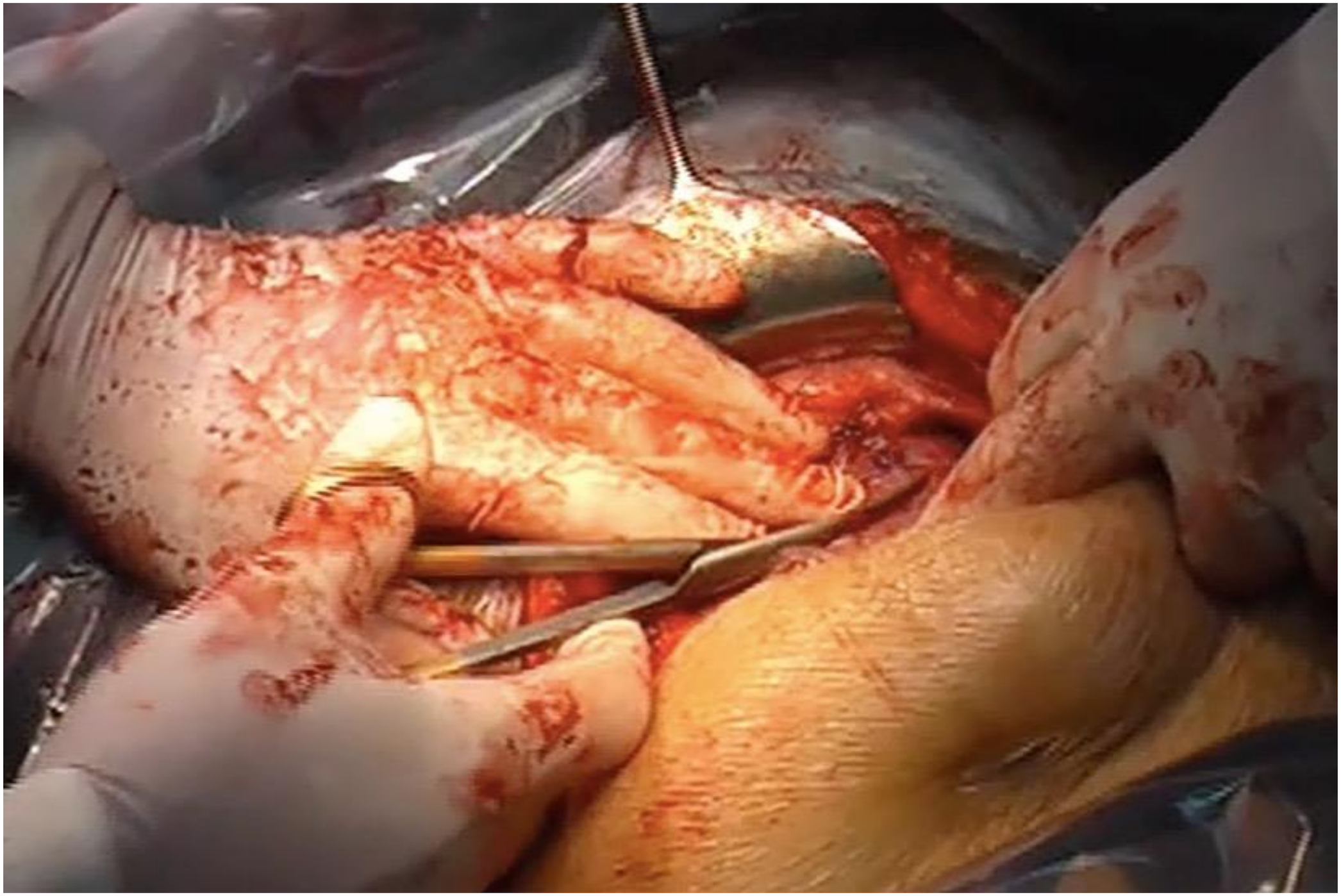
JOSÉ M. PALACIOS JARAQUEMADA, MARIO PESARESI, JUAN C. NASSIF AND SUSANA HERMOSID

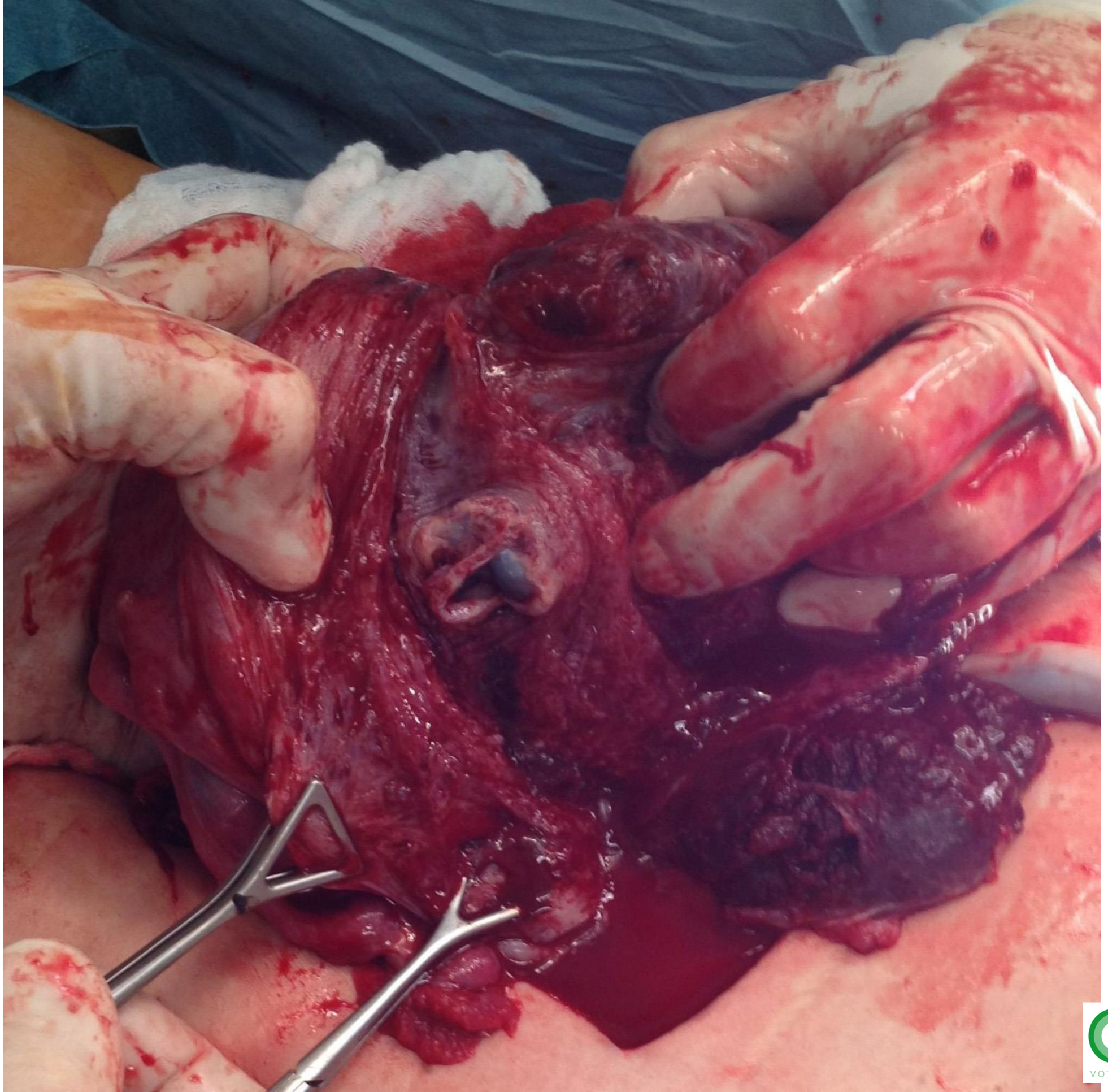
From the Department of Obstetrics and Gynecology, Durand Hospital and the School of Medicine, University of Buenos Aires, Buenos Aires, Argentina

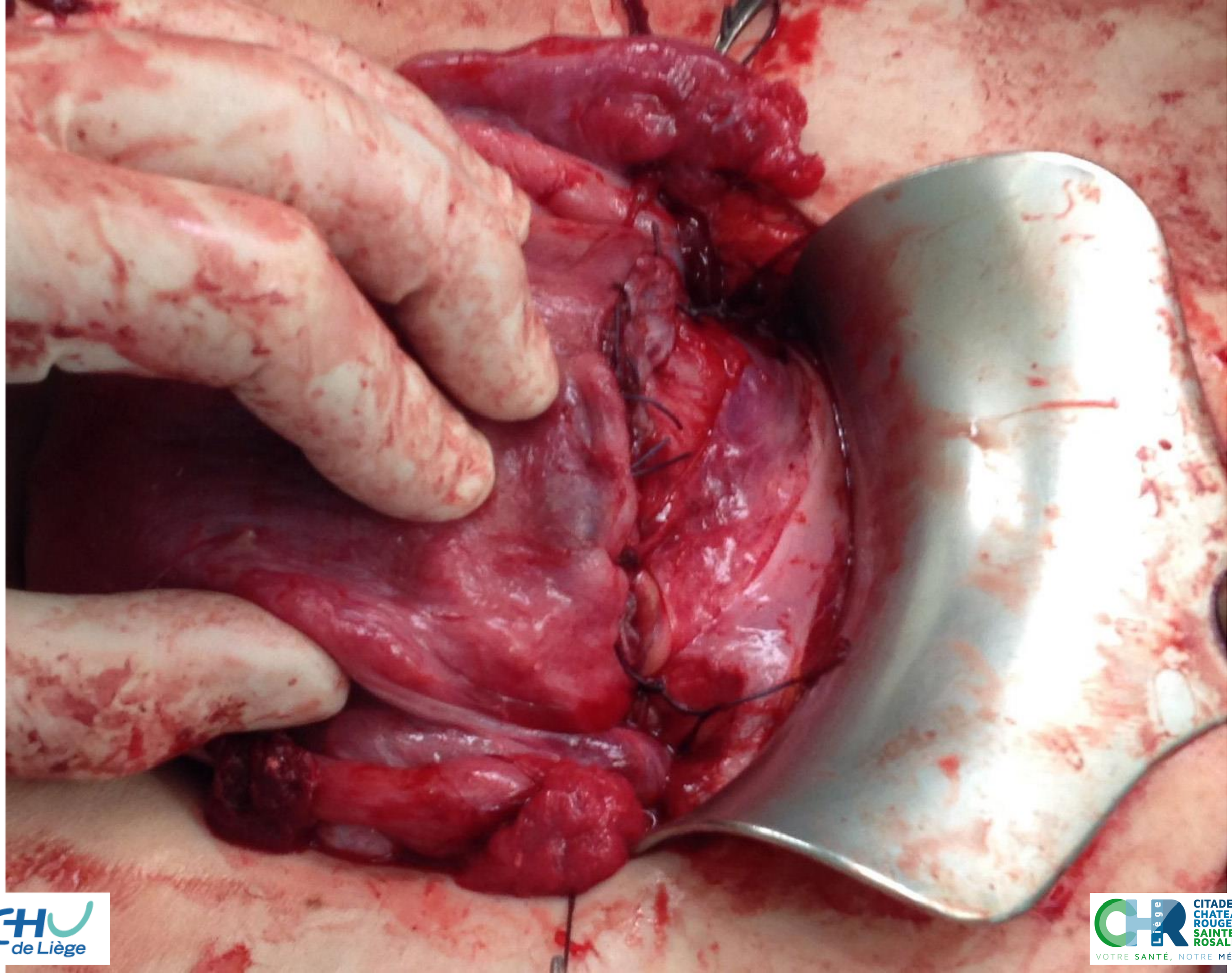




Palacios et al, AOGS, 2004







Hystérectomie

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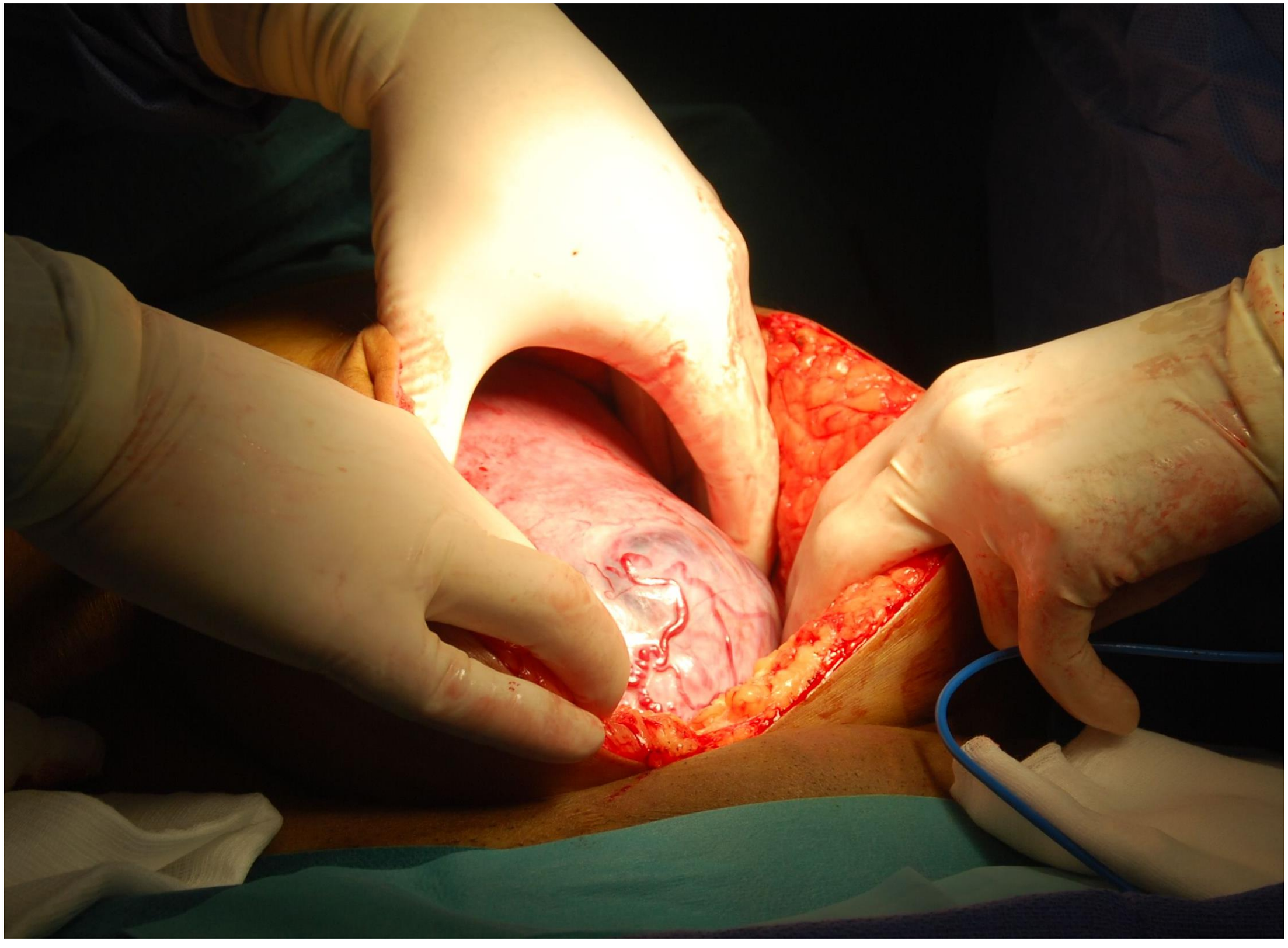

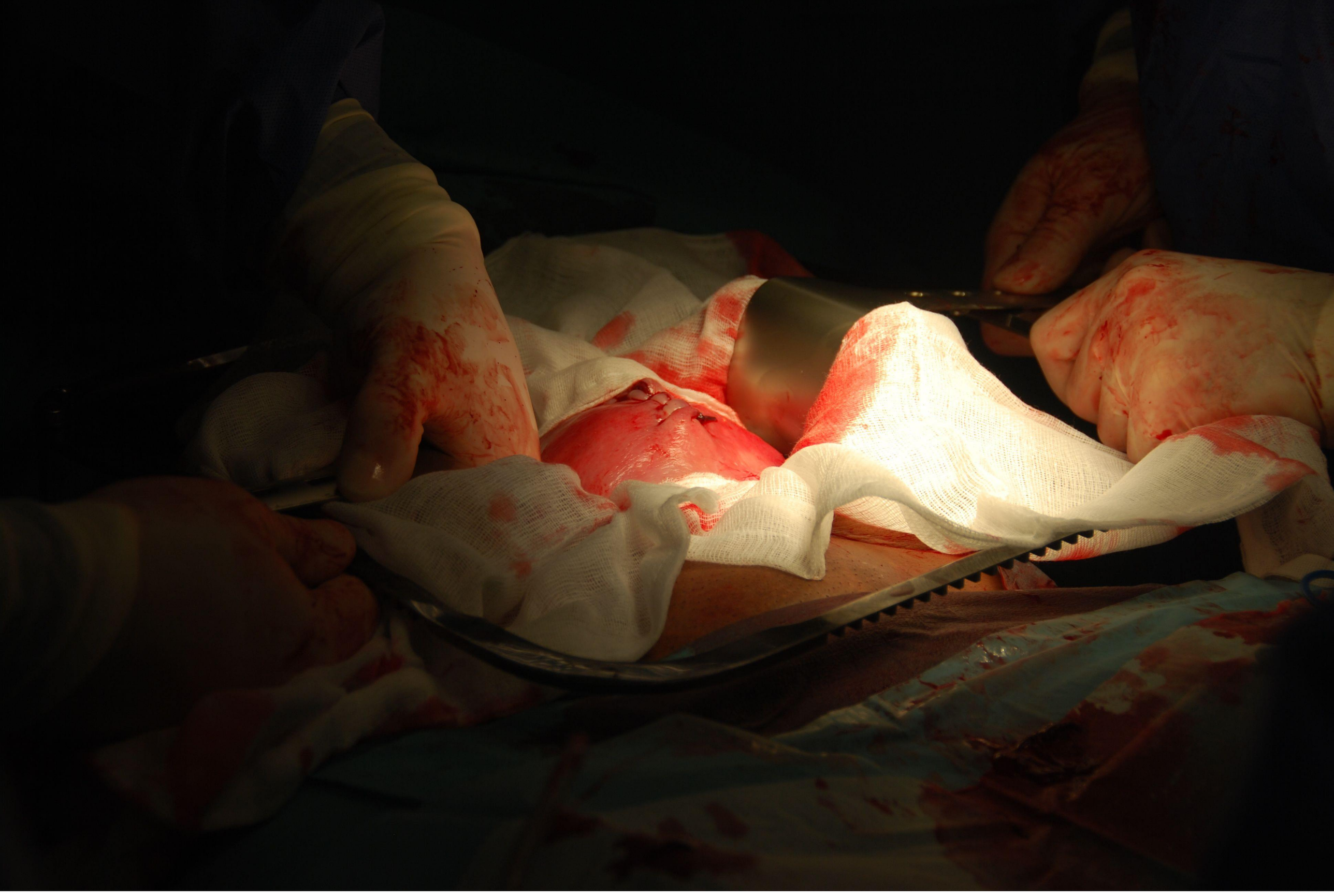

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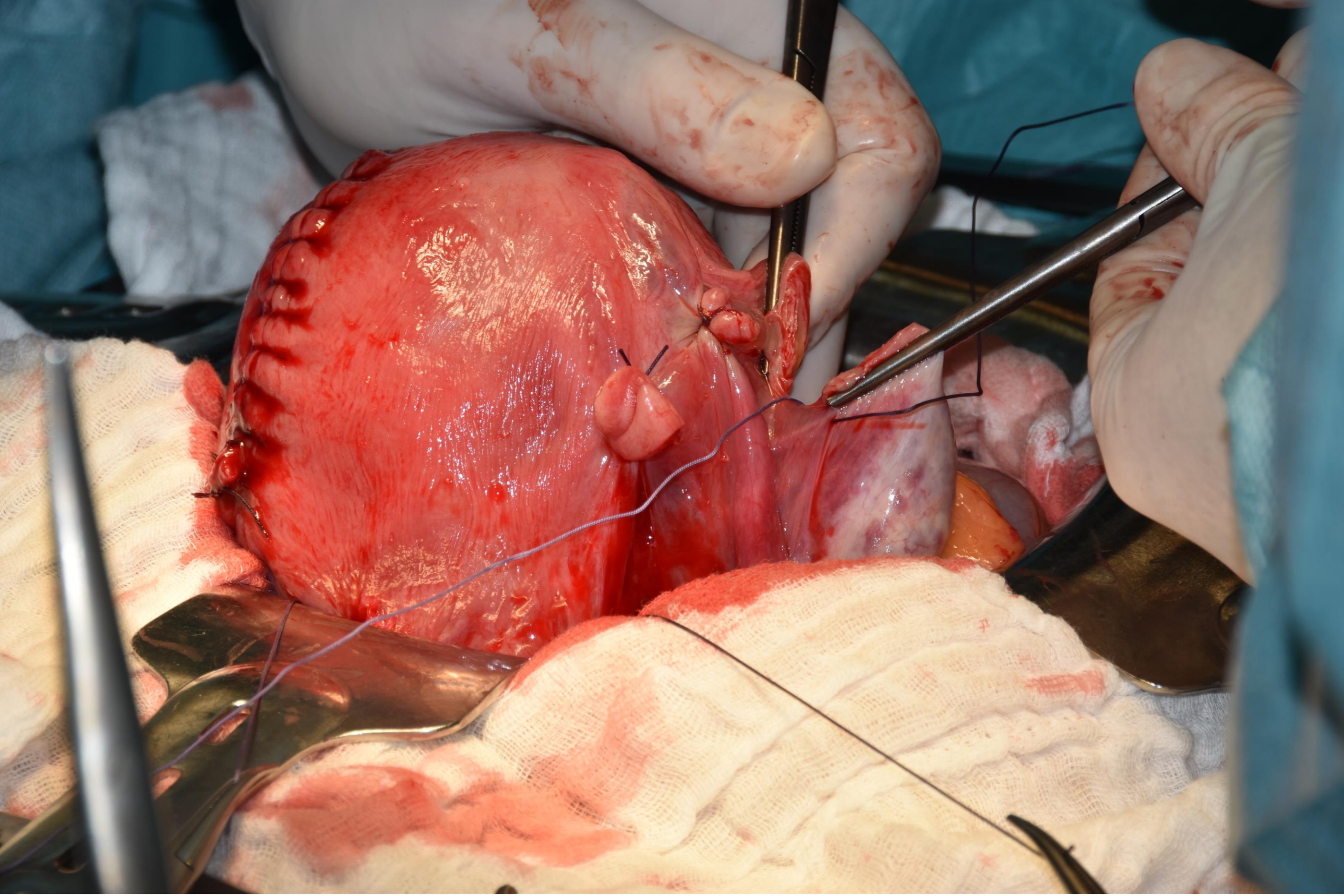

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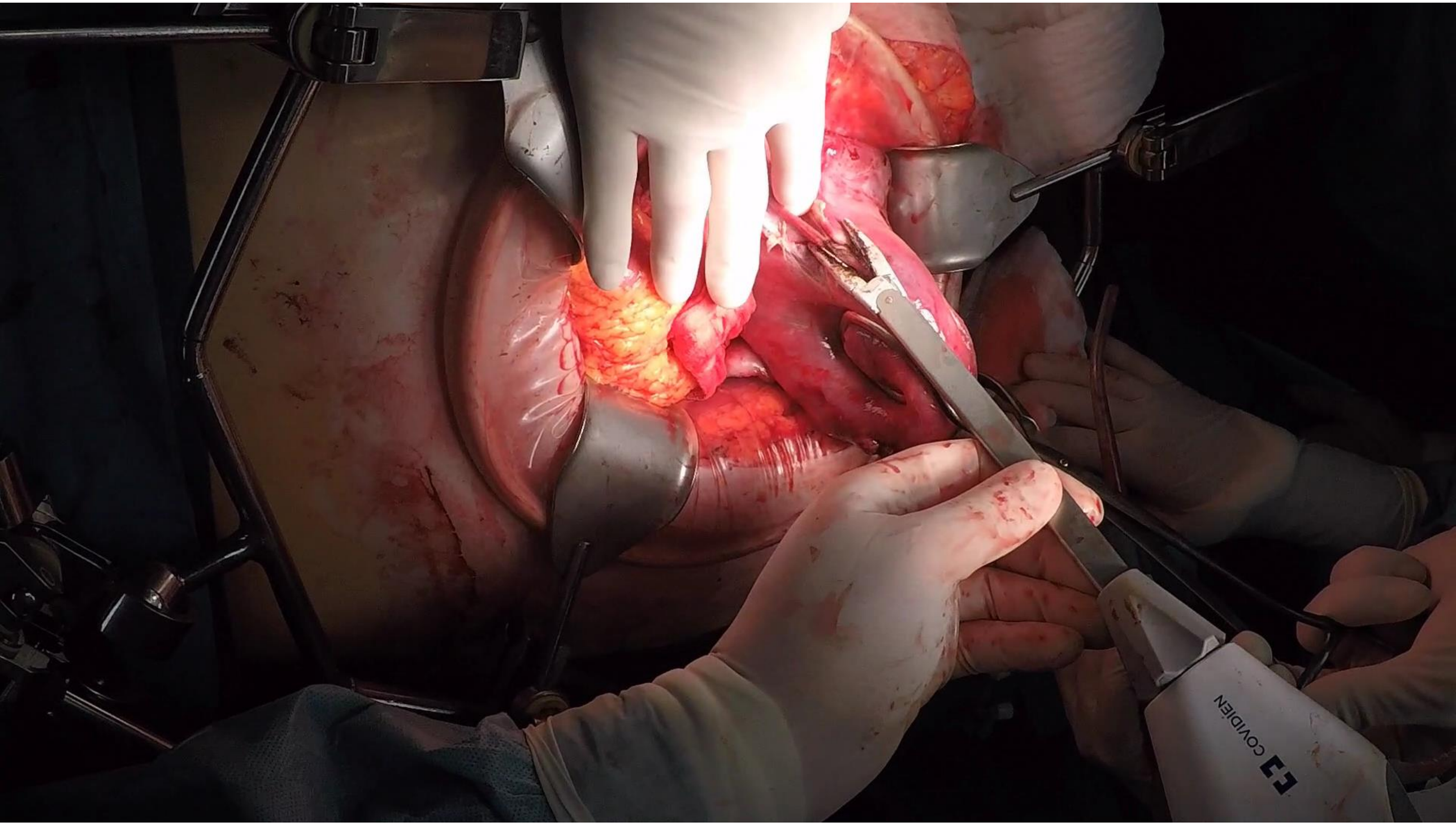

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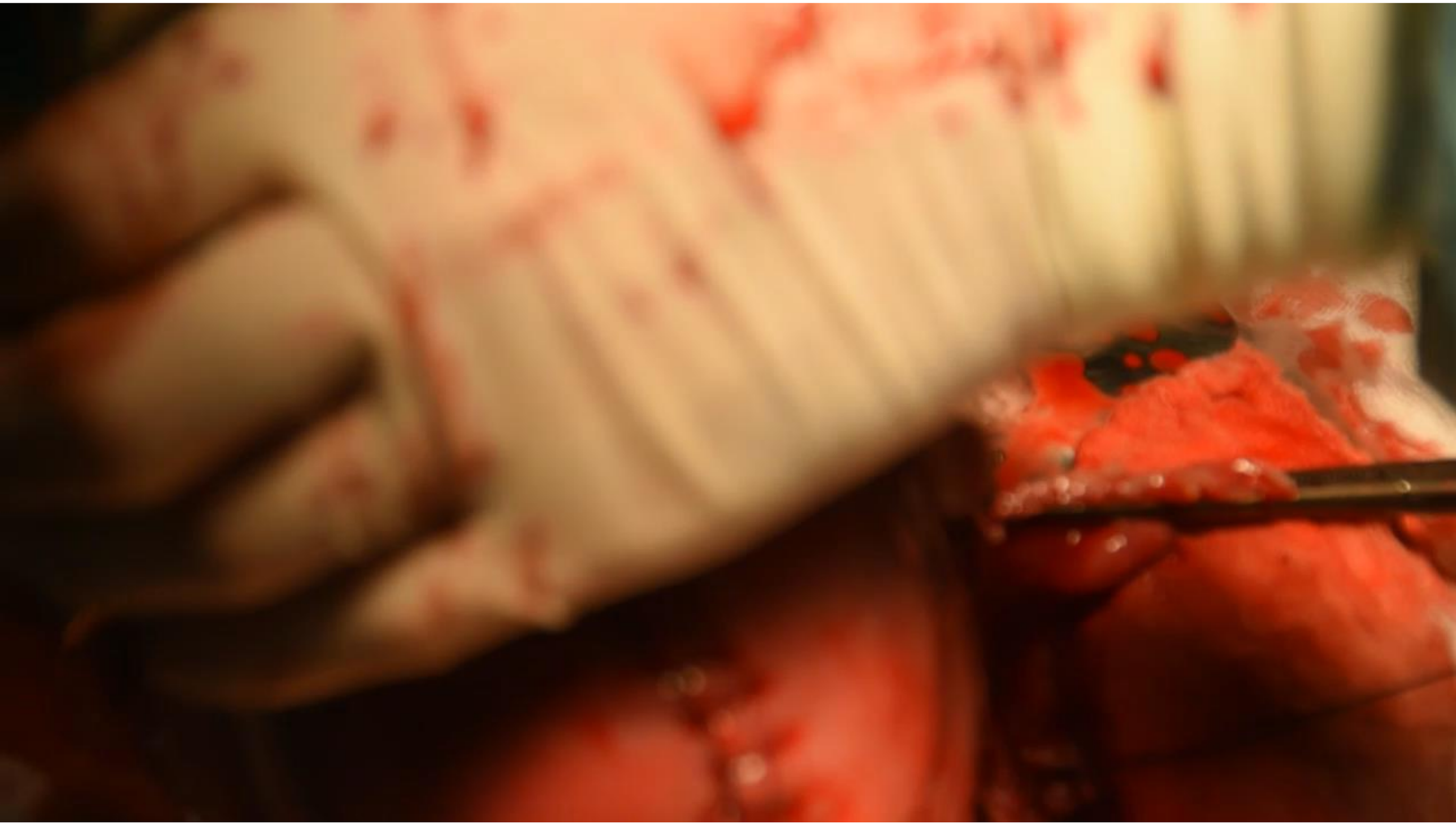

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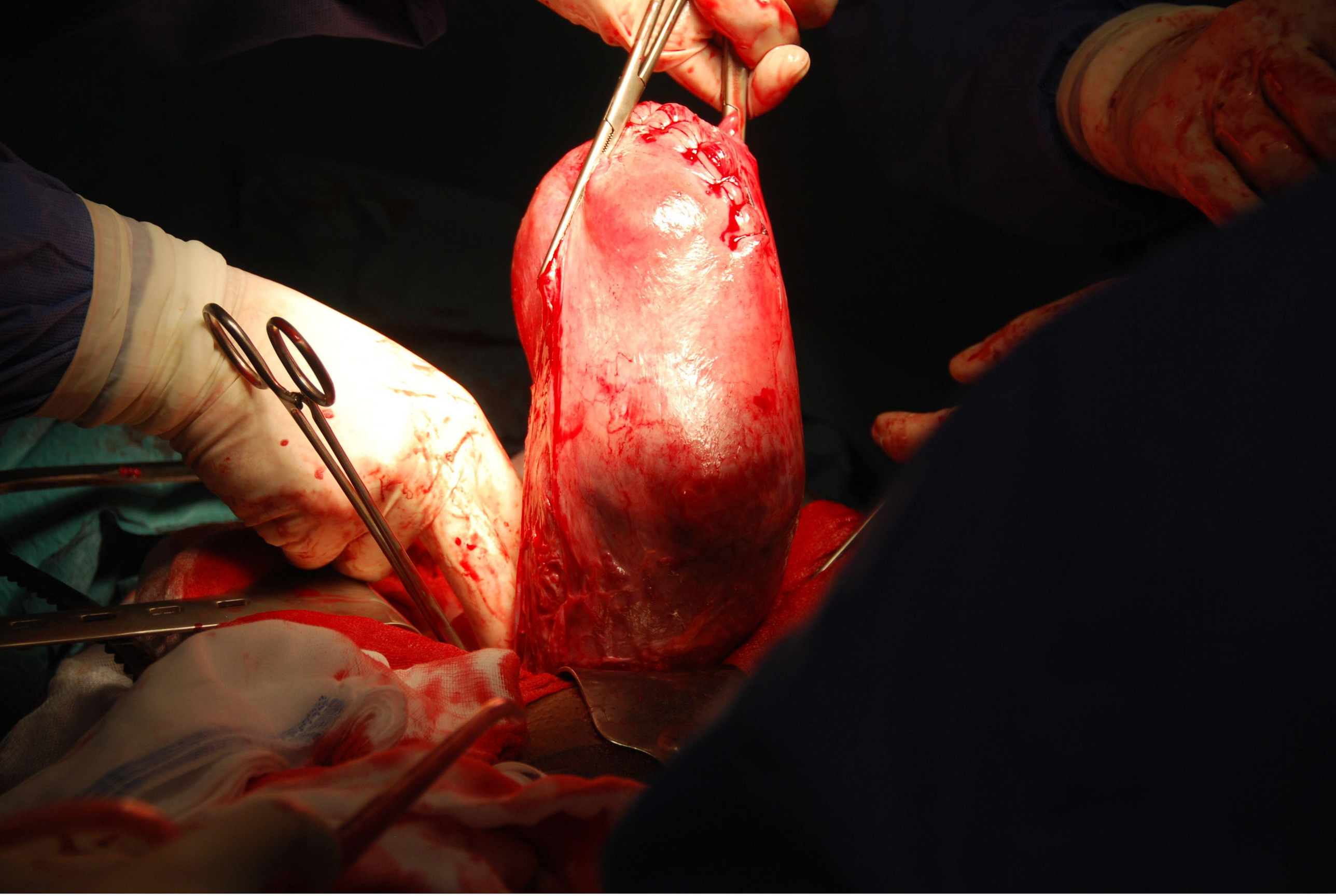

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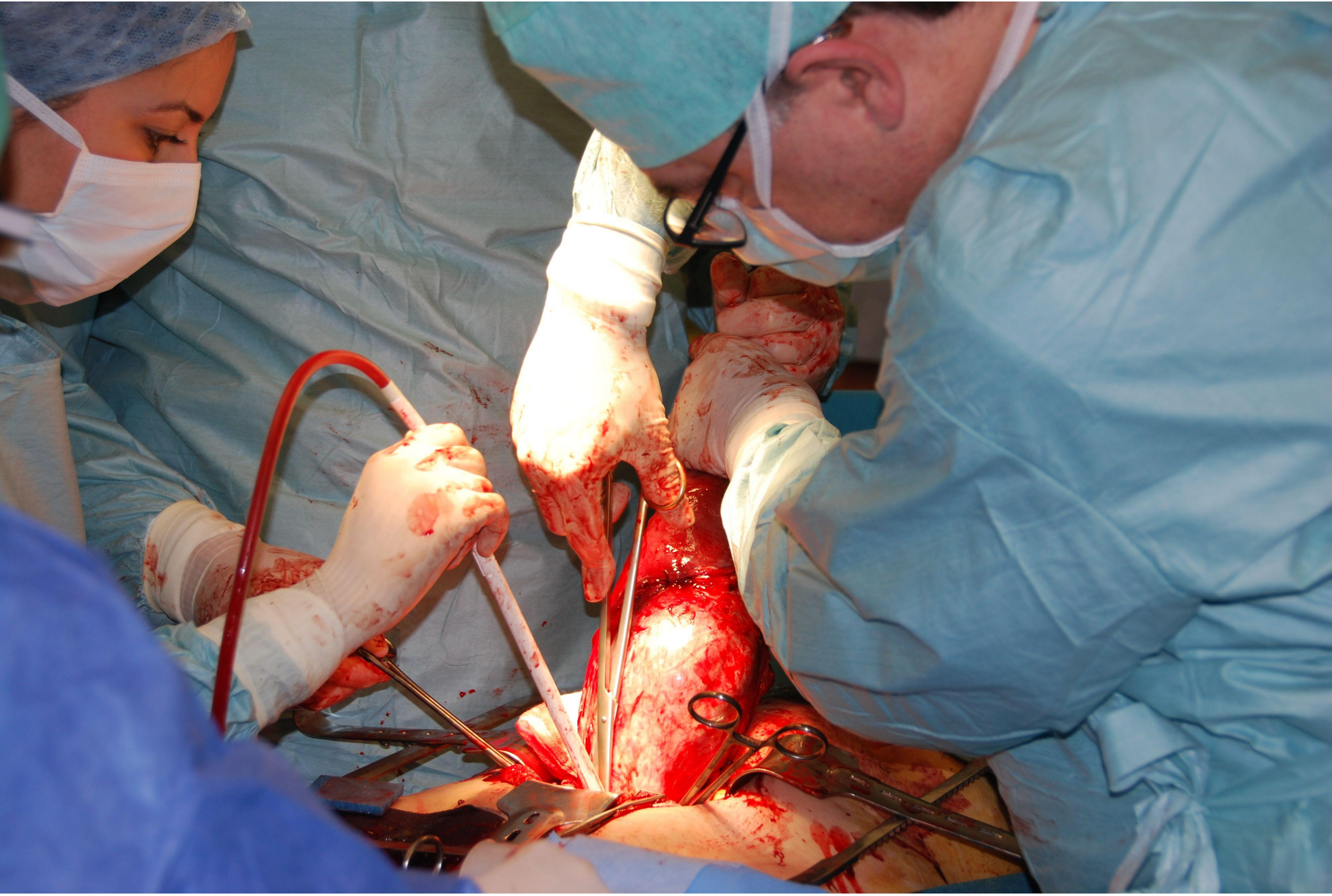

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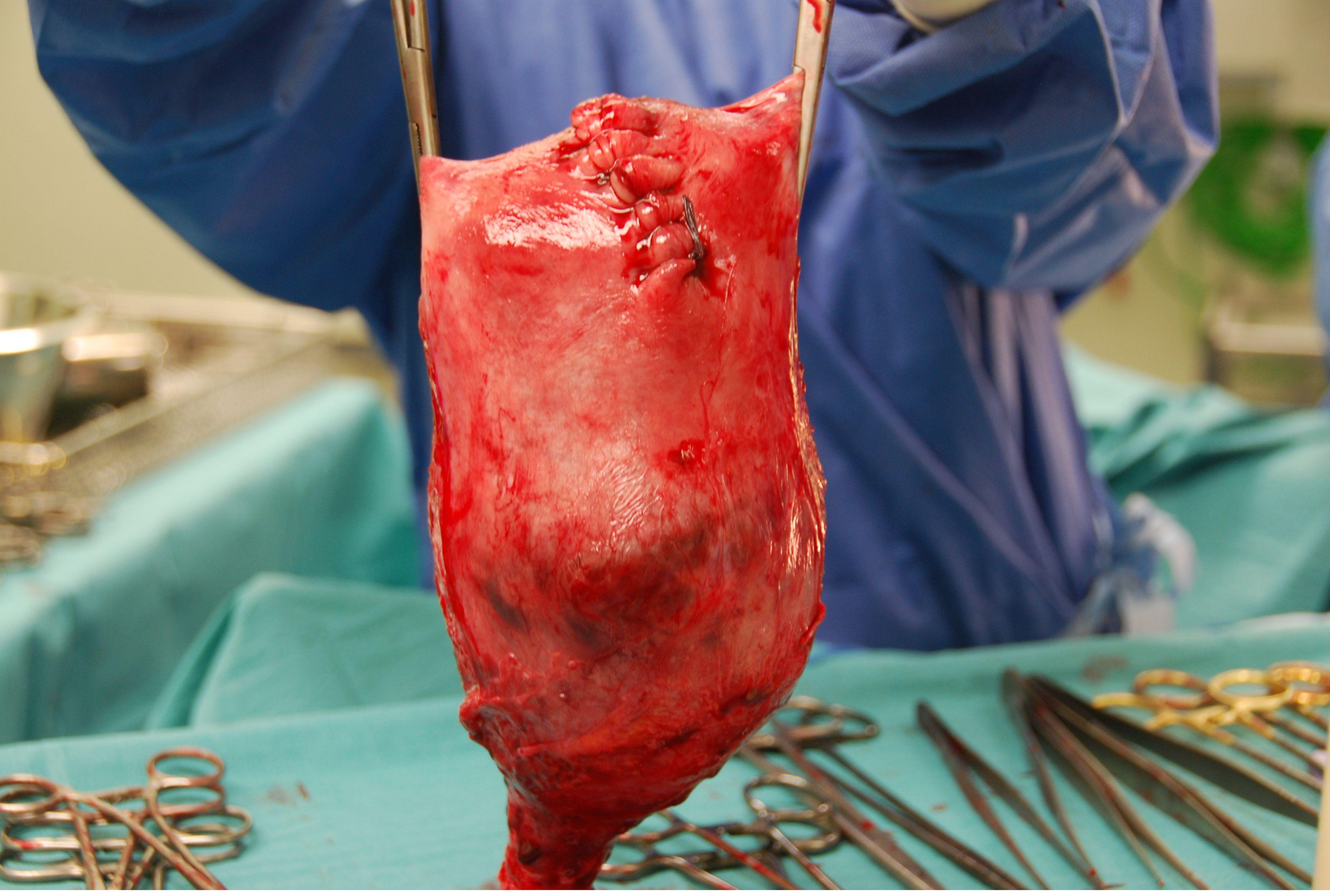

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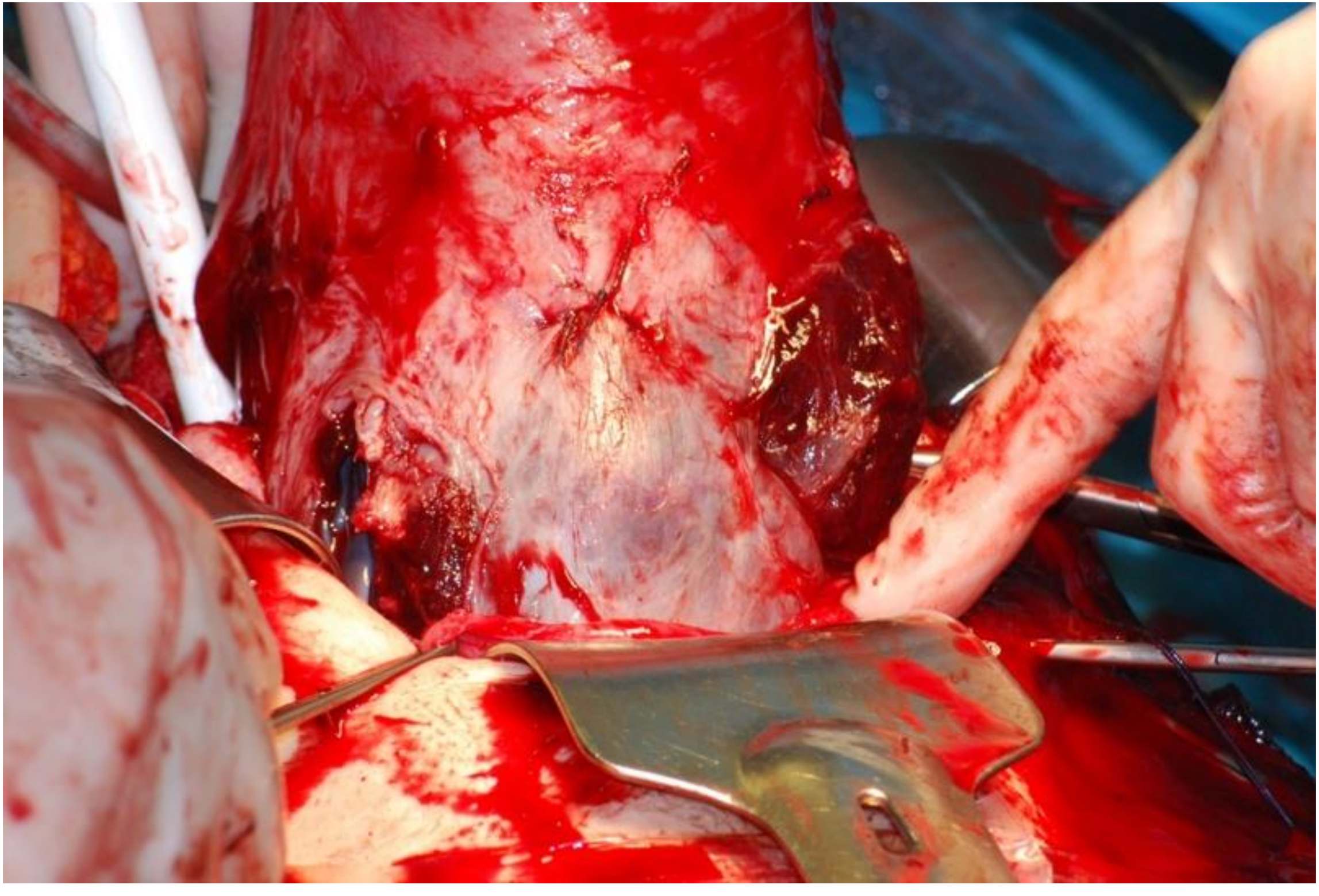

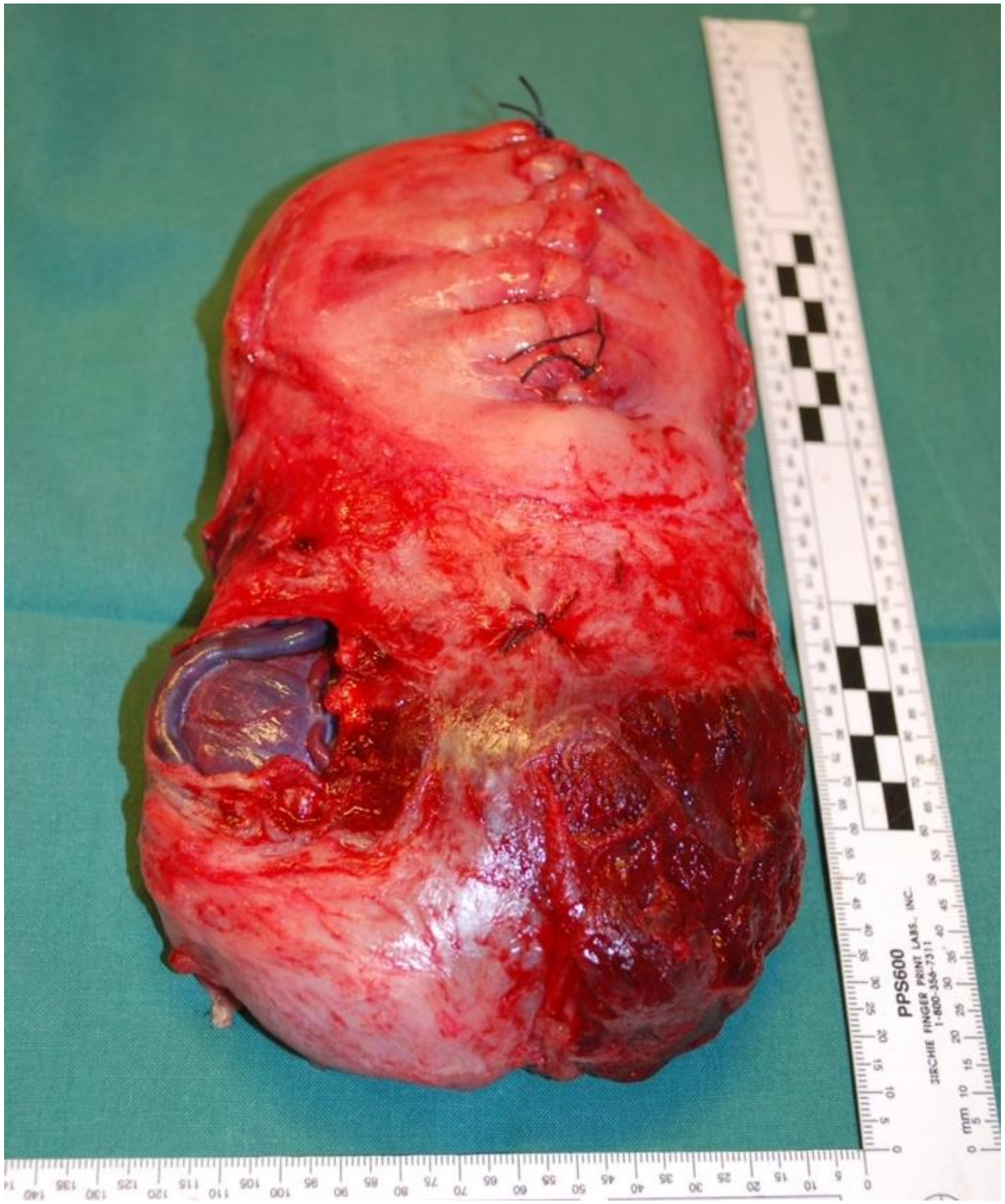
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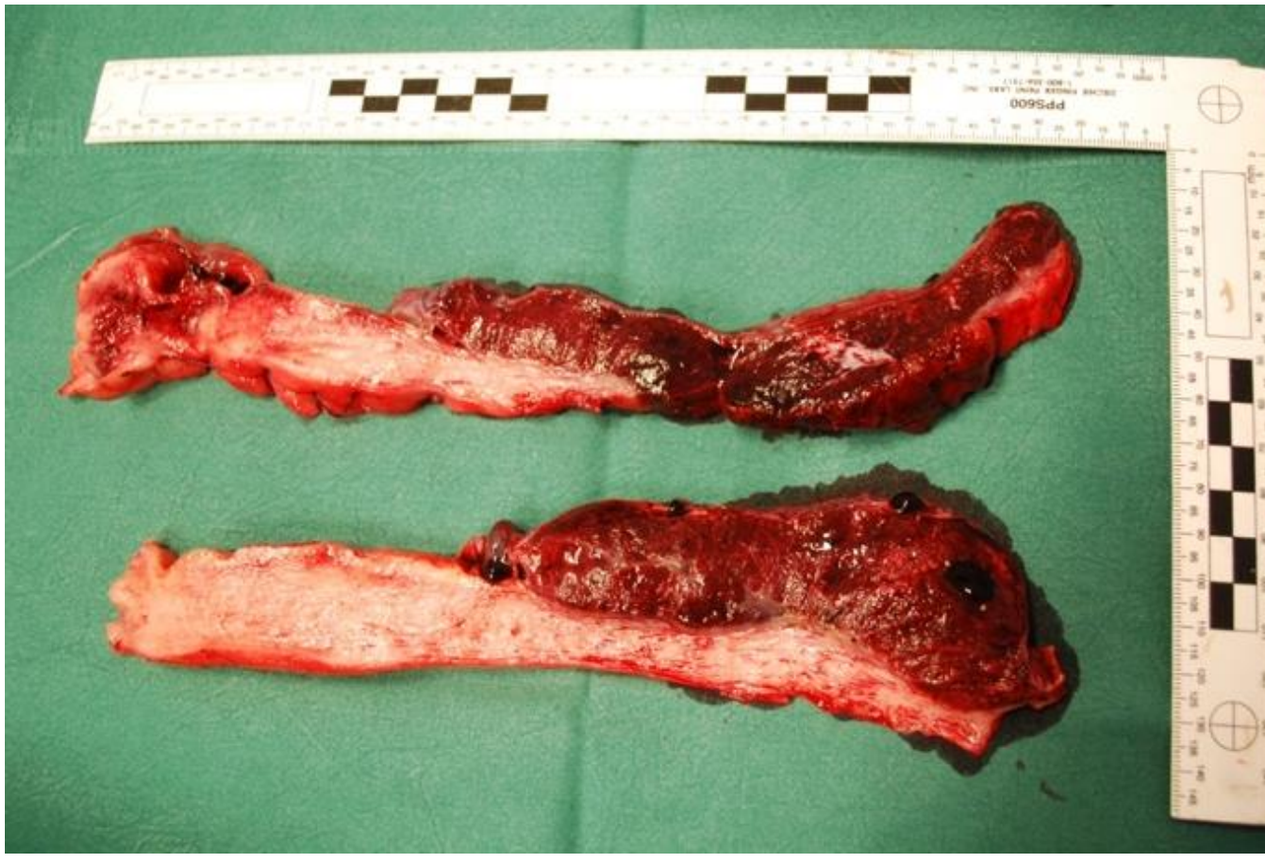
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EW-AIP

European Workinggroup on Abnormally Invasive Placenta

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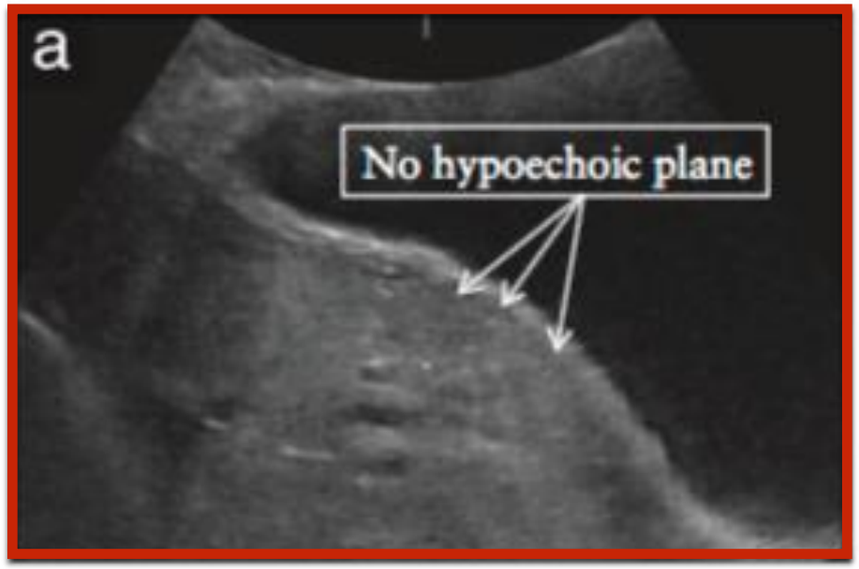
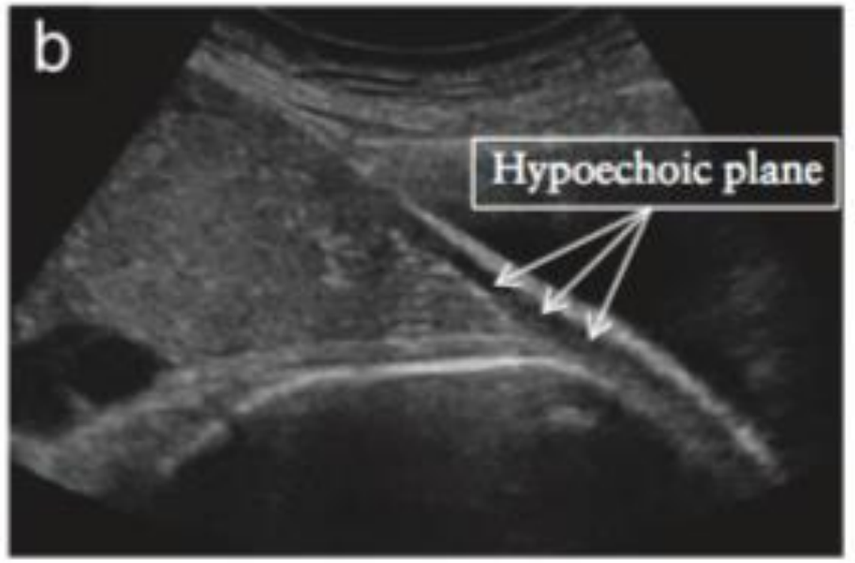
VOTRE SANTÉ, NOTRE MÉTIER


EW-AIP Study Centres

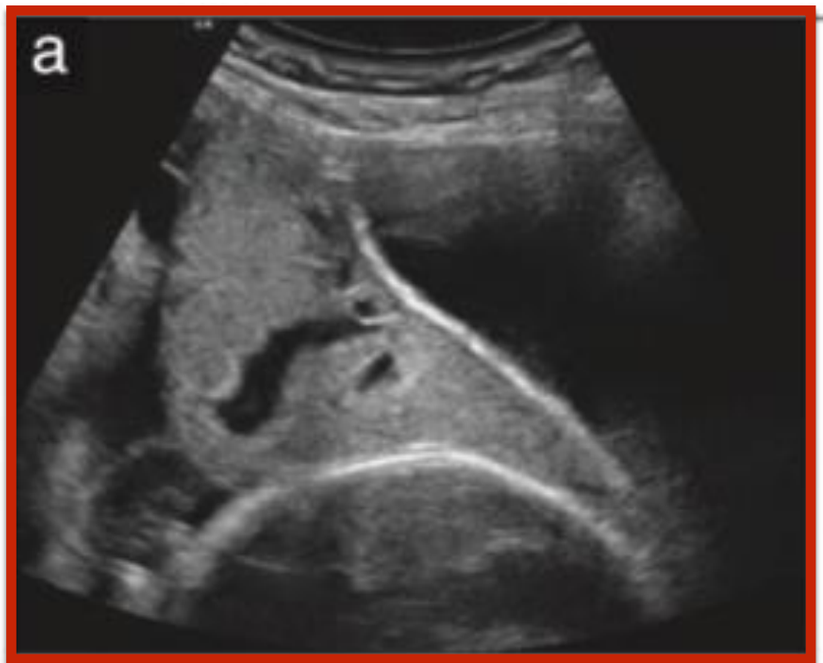
2D GREYSCALE	**EW-AIP suggestions**
Loss of the 'clear zone'	Loss, or irregularity, of the hypoechoic plane in the myometrium underneath the placental bed (the 'clear zone')
Abnormal placental lacunae	Presence of numerous lacunae including some that are large and irregular (Finberg grade 3) often containing turbulent flow visible in greyscale imaging
Bladder wall interruption	Loss or interruption of the bright bladder wall (the hyperechoic band or 'line' between the uterine serosa and the bladder lumen)
Myometrial thinning	Thinning of the myometrium overlying the placenta to <1mm or undetectable.
Placental bulge	Deviation of the uterine serosa away from the expected plane, caused by an abnormal bulge of placental tissue into a neighboring organ, typically the bladder. The uterine serosa appears intact but the outline shape is distorted.
Focal exophytic mass	Placental tissue seen breaking through the uterine serosa and extending beyond it. Most often seen inside a filled urinary bladder.

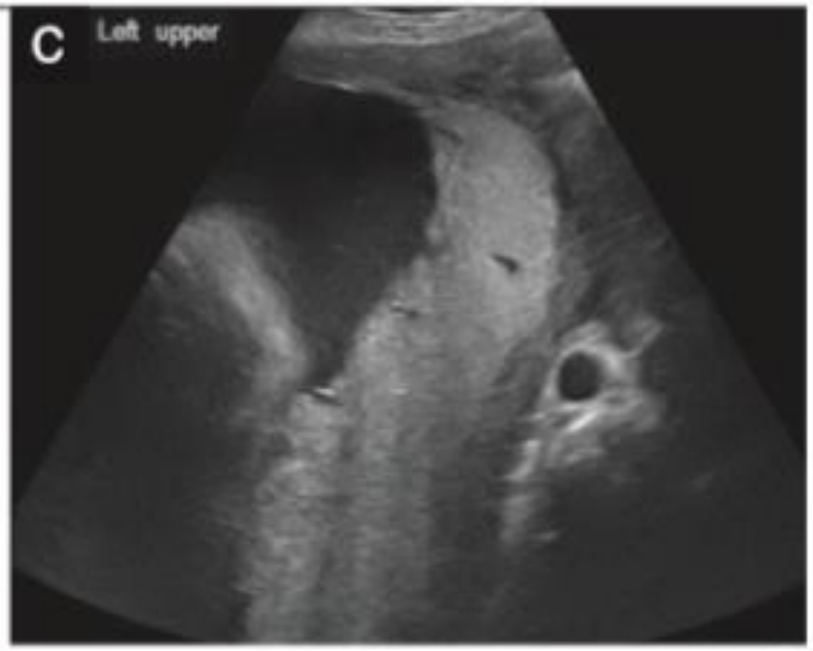
Loss of
the « clear zone »

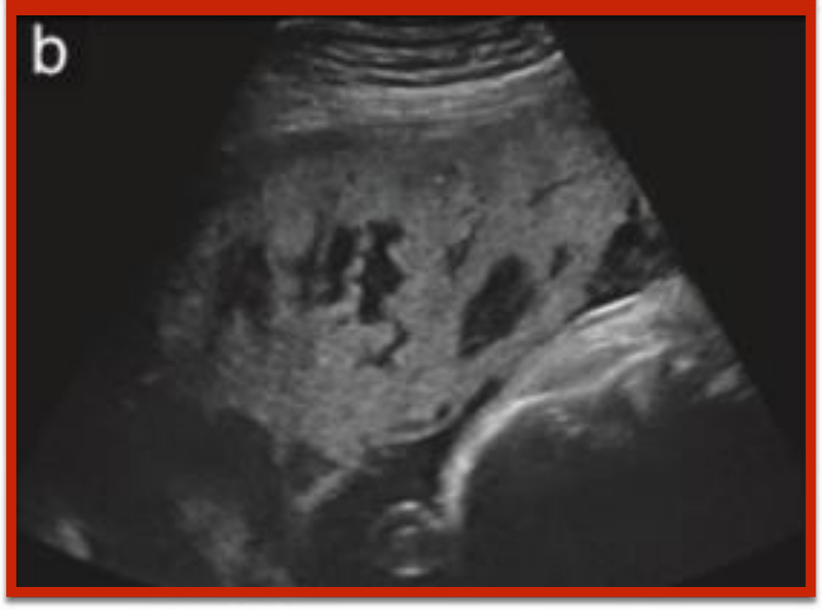


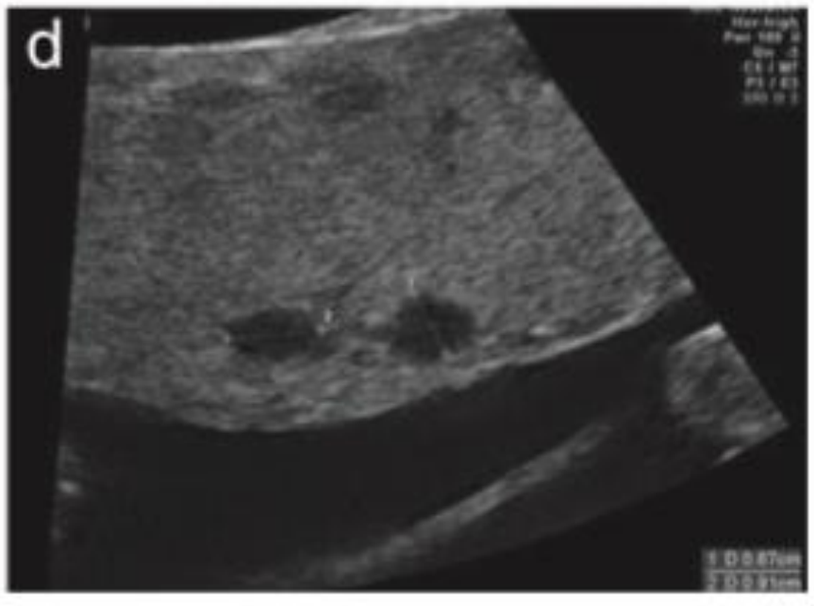


Abnormal placental
lacunae









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Editorial

Pro forma for ultrasound reporting in suspected abnormally invasive placenta (AIP): an international consensus

Z. ALFIREVIC*, A.-W. TANG*, S. L. COLLINS†, S. C. ROBSON‡ and J. PALACIOS-JARAQUEMADA§, on behalf of the Ad-hoc International AIP Expert Group

SUSPECTED ABNORMALLY INVASIVE PLACENTA (AIP)

Ultrasound report

Demographics and Risk Factors

Date: _ _/_ _/ _ _ _ _ Gestational age: _ _ weeks _ days

Parity ☐ Mode of conception: Spontaneous ☐ IVF ☐

Number of previous CS ☐ Number of classical CS ☐

Number of previous surgical evacuations (including TOP) ☐

Was Cesarean scar pregnancy suspected/diagnosed in first trimester?	Yes ☐	No ☐	Not known ☐
Previous uterine surgery (e.g. myomectomy, endometrial ablation)	Yes ☐	No ☐	Not known ☐
History of AIP	Yes ☐	No ☐	Not known ☐
Placenta previa on ultrasound	Yes ☐	No ☐	Not known ☐

If yes: Anterior placenta previa < 2 cm from internal os ☐ Covering internal os ☐

Posterior placenta previa < 2 cm from internal os ☐ Covering internal os ☐

Ultrasound Signs

Cervical length (without funnel or placental tissue)			**mm**
Grayscale ultrasound parameters and definition	**Yes**	**No**	**Unsure**
Loss of 'clear zone' *- Loss, or irregularity, of hypoechoic plane in myometrium underneath placental bed ('clear zone')*			
Myometrial thinning *- Thinning of myometrium overlying placenta to <1mm or undetectable*			
Abnormal placental lacunae *- Presence of numerous lacunae including some that are large and irregular, often containing turbulent flow visible on grayscale imaging*			
Bladder wall interruption *- Loss or interruption of bright bladder wall (hyperechoic band or 'line' between uterine serosa and bladder lumen)*			
Placental bulge *- Deviation of uterine serosa away from expected plane, caused by abnormal bulge of placental tissue into neighboring organ, typically bladder; uterine serosa appears intact but outline shape is distorted*			
Focal exophytic mass *- Placental tissue seen breaking through uterine serosa and extending beyond it; most often seen inside filled urinary bladder*			
Color Doppler ultrasound parameters and definition	**Yes**	**No**	**Unsure**
Uterovesical hypervascularity *- Striking amount of color Doppler signal seen between myometrium and posterior wall of bladder; this sign probably indicates numerous, closely packed, tortuous vessels in that region (demonstrating multidirectional flow and aliasing artifact)*			
Subplacental hypervascularity *- Striking amount of color Doppler signal seen in placental bed; this sign probably indicates numerous, closely packed, tortuous vessels in that region (demonstrating multidirectional flow and aliasing artifact)*			
Bridging vessels *- Vessels appearing to extend from placenta, across myometrium and beyond serosa into bladder or other organs; often running perpendicular to myometrium*			
Placental lacunae feeder vessels *- Vessels with high-velocity blood flow leading from myometrium into placental lacunae, causing turbulence upon entry*			
Parametrial involvement	**Yes**	**No**	**Unsure**
- Suspicion of invasion into parametrium			

Clinical Significance of Ultrasound Findings

Probability of clinically significant AIP High ☐ Intermediate ☐ Low ☐

Extent of AIP Focal ☐ Diffuse ☐

CHU de Liège

CITADELLE CHATEAU ROUGE SAINTE ROSALIE TRE MÉTIER

www.ew-aip.org

Conseils

- Eviter l’hypothermie
- Contrôler régulièrement: Hb, Plaquettes, coagulation
- Appeler à l’aide
- Acide tranexamique
- Anticiper la transfusion (si > 1,5-2,0 litres)
- Comprimer l’aorte, peut faire gagner du temps

Conclusion

- AIP est rare, mais de plus en plus fréquent
- Eviter la surprise: chercher en anténatal
- Préparation de la chirurgie: plan A, plan B,..
- Communication

Merci! - Questions?

Search for AIP

AIP-Management
«CHR Citadelle»