CONSERVATIVE MANAGEMENT OF INTRACTABLE POSTPARTUM HEMORRHAGE

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POSTPARTUM HEMORRHAGE PROTOCOLS

- Identification of source of bleeding
- Call for assistance
- Infusion of colloids, crystalloids, blood replacement
- Use of uterotonic drugs, uterine tamponade, etc
- Embolization
- Surgical control of bleeding

CASE REPORT

02.00 am:

YOU ARE ON DUTY AND RECEIVE A PATIENT WITH PPH FROM ANOTHER HOSPITAL:

- 26 YEAR-OLD PATIENT, PRIMIPARA, SPONTANEOUS VAGINAL DELIVERY AT 39.1 WEEKS, POSTPARTUM BLEEDING, D&C BY ABERRANT PLACENTAL COTYLEDON.
- AFTER 4 MILD EPISODES OF VAGINAL BLEEDING AND ABSENCE OF RESPONSE TO THE TREATMENT, SHE WAS TRASFERRED TO YOUR HOSPITAL (1 H TRIP)

CURRENT STATUS (03.00 AM)

HEMODYNAMIC PARAMETERS

Arterial pressure 70/40

Cardiac beats 140

Deep peripheral shock

Ear temperature 35.5^{o}C

Heavy vaginal bleeding

LABORATORY TEST

Hematocrit 15

Platelets 50,000

Fibrinogen 70 mg%

Quick 66%

UNDETECTED LACK OF TIME

PERCENTAGE OF PLACENTAL BLOOD FLOW AT TERM	5%	10%	20%
80 MIN	25 ML/M	50 ML/M	100 ML/M
	2000 ML	4000 ML	8000 ML

ACTIVE PROBLEMS

- ✓ CONTINUOUS VAGINAL BLEEDING
- ✓ HYPOTENSION
- ✓ PERIPHERAL SHOCK
- ✓ COAGULOPATHY

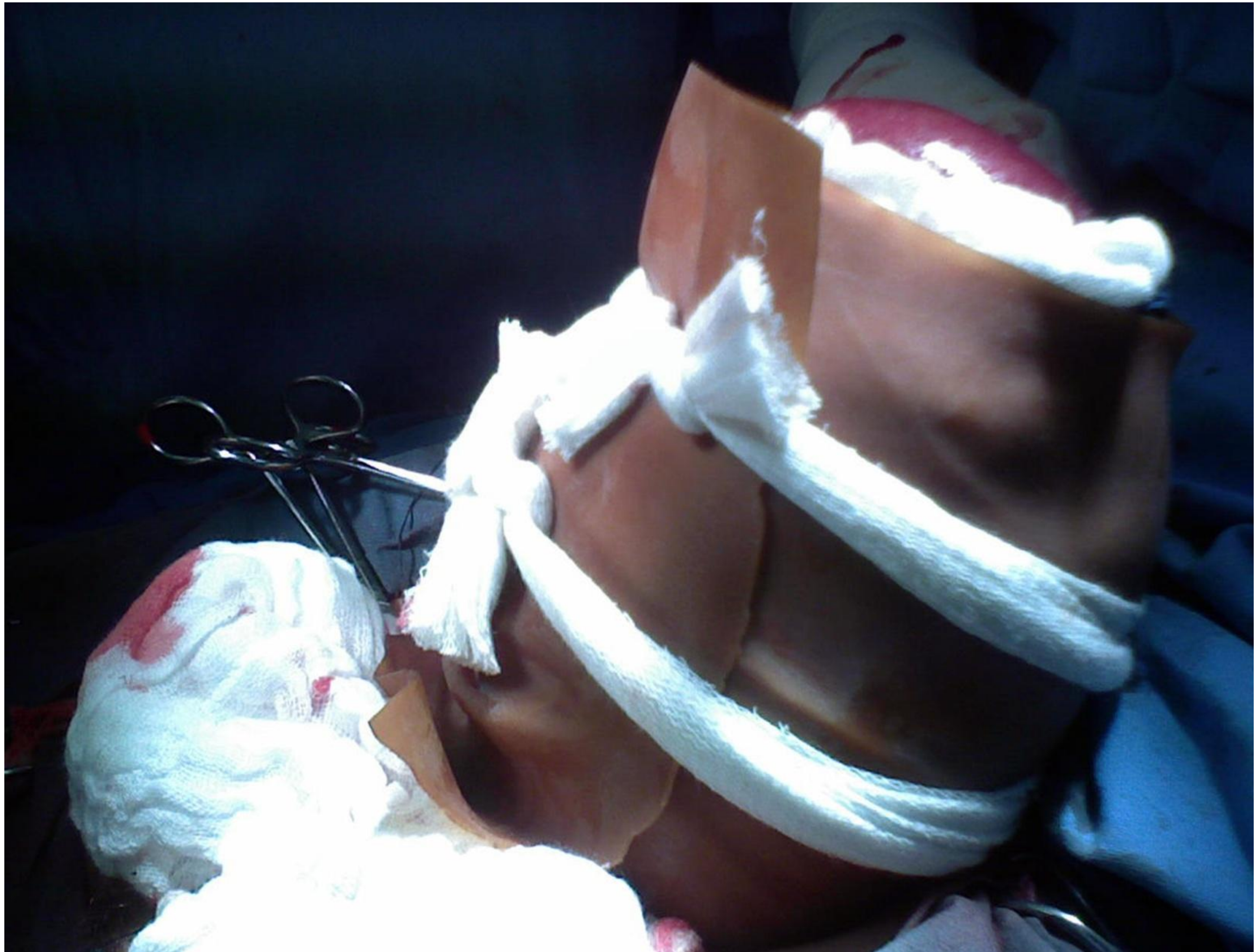
THERAPEUTIC OPTIONS

- ✓ SUBCLAVIAN PUNCTURE
- ✓ IMMEDIATE HYSTERECTOMY
- ✓ ENDOVASCULAR EMBOLIZATION
- ✓ UTERINE TAMPONADE
- ✓ URGENT USE OF rVIIa
- ✓ UTERINE VASCULAR CONTROL

TOO LATE?

THINK SIMPLE, DO IT IMMEDIATELY

- ✓ STOP THE BLEEDING
- ✓ RESTORE VOLUME
- ✓ CALL FOR BLOOD
- ✓ PUT AN EXTERNAL UTERINE PACKING
- ✓ WAIT



ADVANTAGES AND QUESTIONS

WRAPPING EXPELLED UTERINE BLOOD FROM GENERAL CIRCULATION

IT CAN BE PLACED FOR 6 HOURS

OPENING OF BROAD LIGAMENT IS NECESSARY IN SAME CASES

IT IS CHEAP (LESS THAN 10 U$) AND USUALLY AVAILABLE IN SURGICAL ROOMS

PRACTICAL INFORMATION

BLEEDING IS NOT THE SAME AS HEMORRHAGIC SHOCK

STOP THE BLEEDING IS THE FIRST MEASURE TO IMPROVE THE TREATMENT

HYSTERECTOMY DURING HEMORRHAGIC SHOCK WORSENS CLINICAL PROGNOSIS

MODIFICATION OF HEMODYNAMIC AND HEMOSTATIC STATUS ALLOWS BETTER CHANCES OF DEFINITIVE UTERINE HEMOSTASIS

MANAGEMENT OF PELVISUBPERITONEAL HEMATOMAS WITH HEMODYNAMIC DETERIORATION

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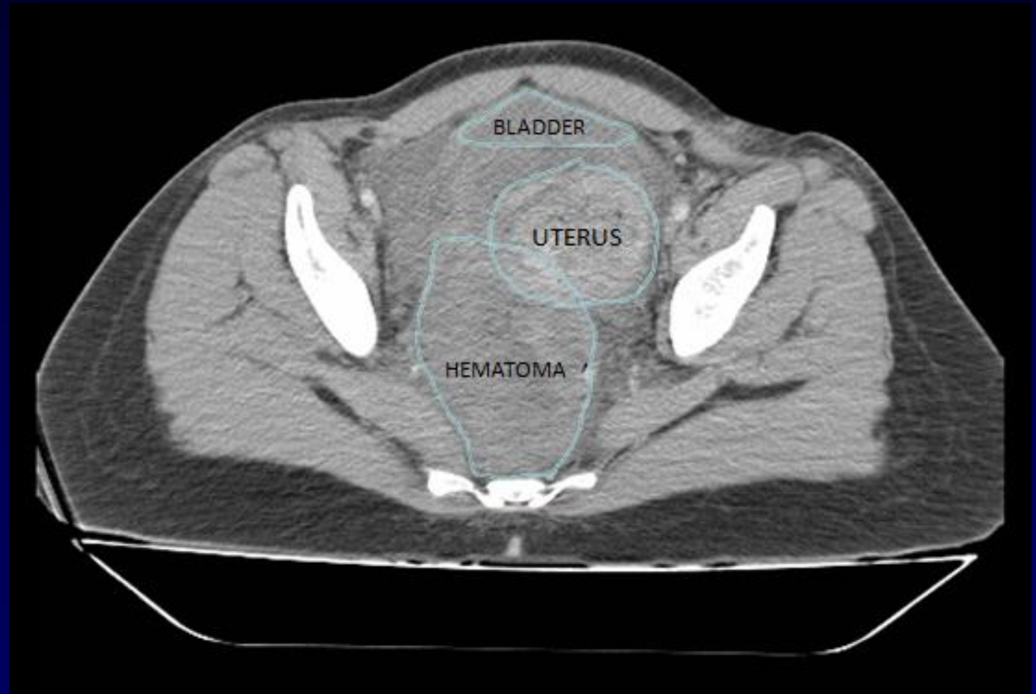
HIDDEN PROBLEMS IN PPH

CASE 1

- Patient: 25 years old, first pregnancy, spontaneous labor (5 h) vertex cephalic position, lateral episiotomy.
- 2 pm: Vaginal delivery, fetus with hand in head, placental detachment normal, female baby 3.750 g.
- 4 pm: Intense vaginal bleeding, surgical examination showed a lateral vaginal tear, two stitches were made and bleeding stopped.
- 6pm: Hypotension, a large hematoma was discovered and drained in the ischiorrectal fossae.
- 10pm: Patient stable (TA 110-80) without bleeding.

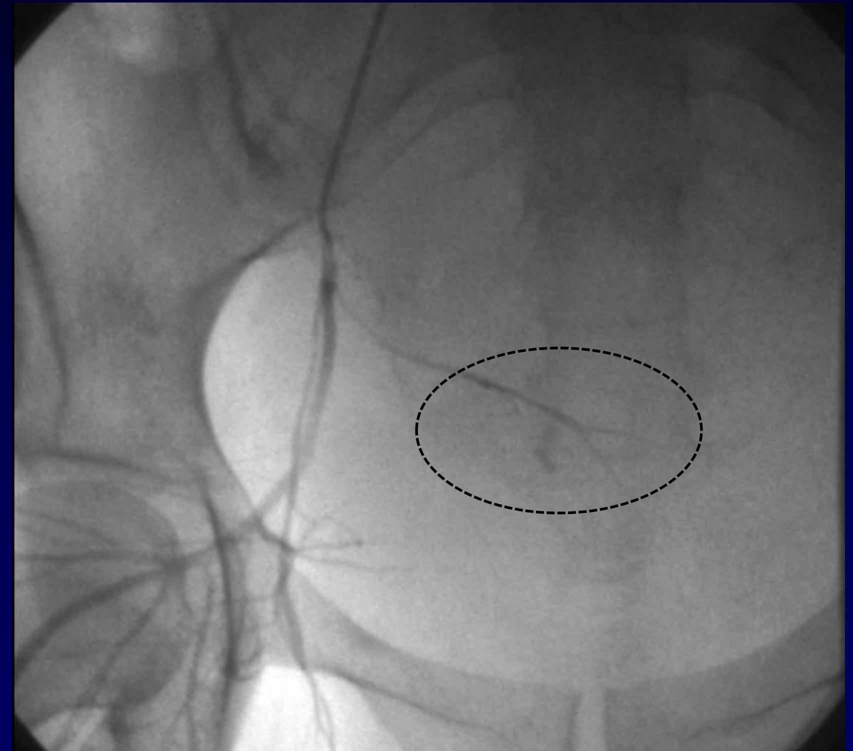
CASE 1

11 PM: HYPOTENSION (85/40), A LARGE PELVISUBPERITONEAL HEMATOMA WAS SEEN BY CT



CASE 1

- 11.30 PM: INTENSE FLUID EXPANSION.
- 00.30-01.30 H. INTERVENTIONAL RADIOLOGY: ARTERIOGRAPHY DETECTED A RUPTURE OF VAGINAL BRANCH OF UTERINE ARTERY.
- PROCEDURE: ARTERIAL OCCLUSION WITH GELFOAM, BILATERAL EXPLORATION WITHOUT BLEEDING.



CASE 1

- 02.00 AM: AFTER MASSIVE RESUSCITATION, THE PATIENT RECOVERED ARTERIAL PRESSURE AND DIURESIS.
- 04.30 AM: THE ARTERIAL PRESSURE DROPPED AGAIN, NO VAGINAL BLEEDING WAS SEEN. A NEW CT SHOWED THE SAME SIZE OF PELVISUBPERITONEAL HEMATOMA.
- WHAT WOULD YOU DO:

- NEW ANGIOGRAPHY?
- SURGERY?
- INCREASE VOLUME REPLACEMENT?

CASE 1

- ANGIOGRAPHY:

  No bleeding was seen by collaterals of anterior branches of IIA.

- NEW CT:

  It showed the same size of previous hematoma, no additional diagnosis performed.

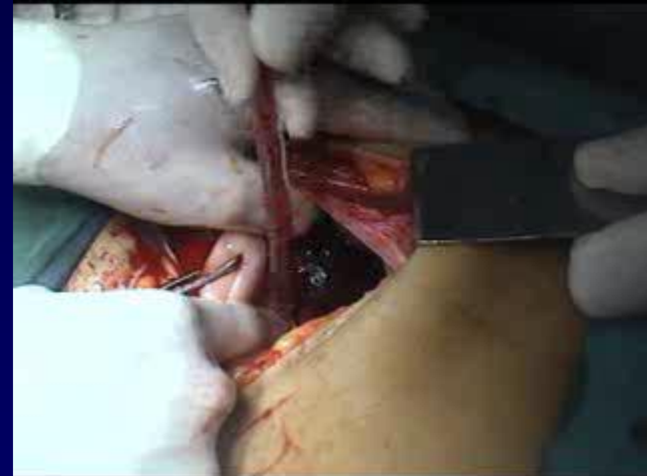
CASE 1

- SURGERY

- WHEN YOU OPEN THE ABDOMEN YOU CAN SEE THE RETROPERITONEAL HEMATOMA.

- WHICH IS YOUR NEXT STEP?

  - OPEN IT
  - DON'T OPEN IT



CASE 1

POSTERIOR DISSECTION OF PELVIC URETER

CHARITÉ UNIVERSITY, CENTER FOR ANATOMY
BERLIN, GERMANY 2009

PROF. JOSÉ M PALACIOS-JARAQUEMADA

CASE 1

DISSECTION OF DISTAL URETER IN A FRESH CORPSE

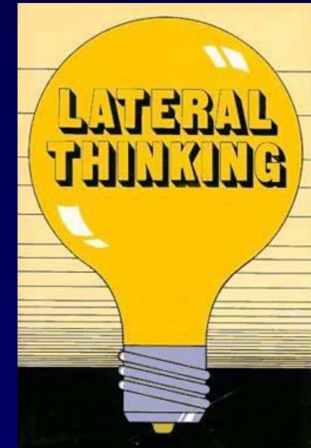
CHARITÉ UNIVERSITY, CENTER FOR ANATOMY
BERLIN, GERMANY. 2009

PROF. JOSÉ M PALACIOS-JARAQUEMADA

CASE 1

- YOU HAVE DECIDED TO OPEN THE HEMATOMA AND DISSECT THE URETER, BUT NO SIDES OF LOWER UTERUS, CERVIX OR UPPER VAGINA HAVE A RECOGNIZABLE LESION OR SOURCE OF BLEEDING.

➢ WHAT WOULD YOU DO?



CASE 1

PREVESICAL VAGINAL ACCESS IN A FRESH CORPSE

CHARITÉ UNIVERSITY, CENTER FOR ANATOMY
BERLIN, GERMANY 2009

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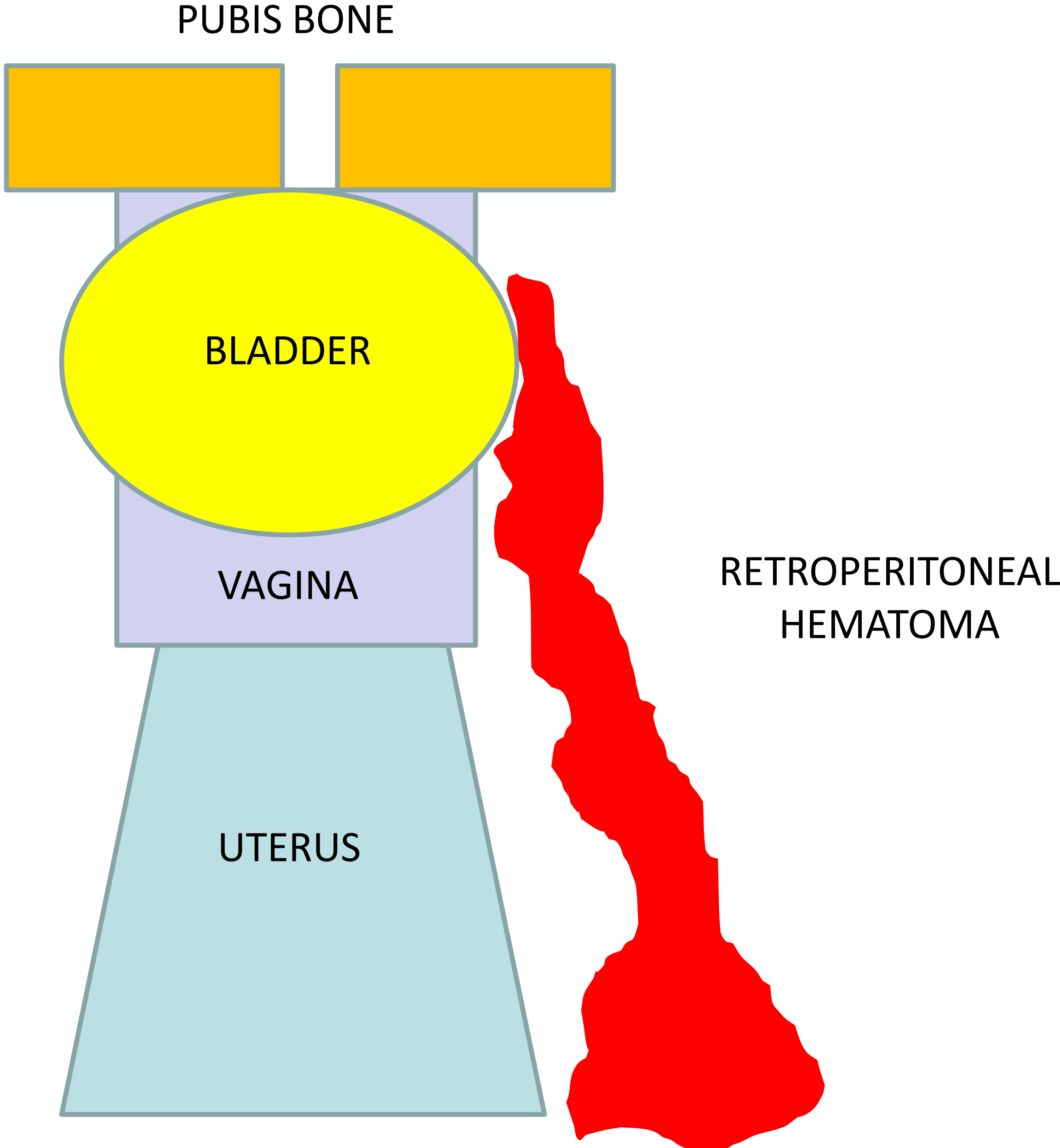
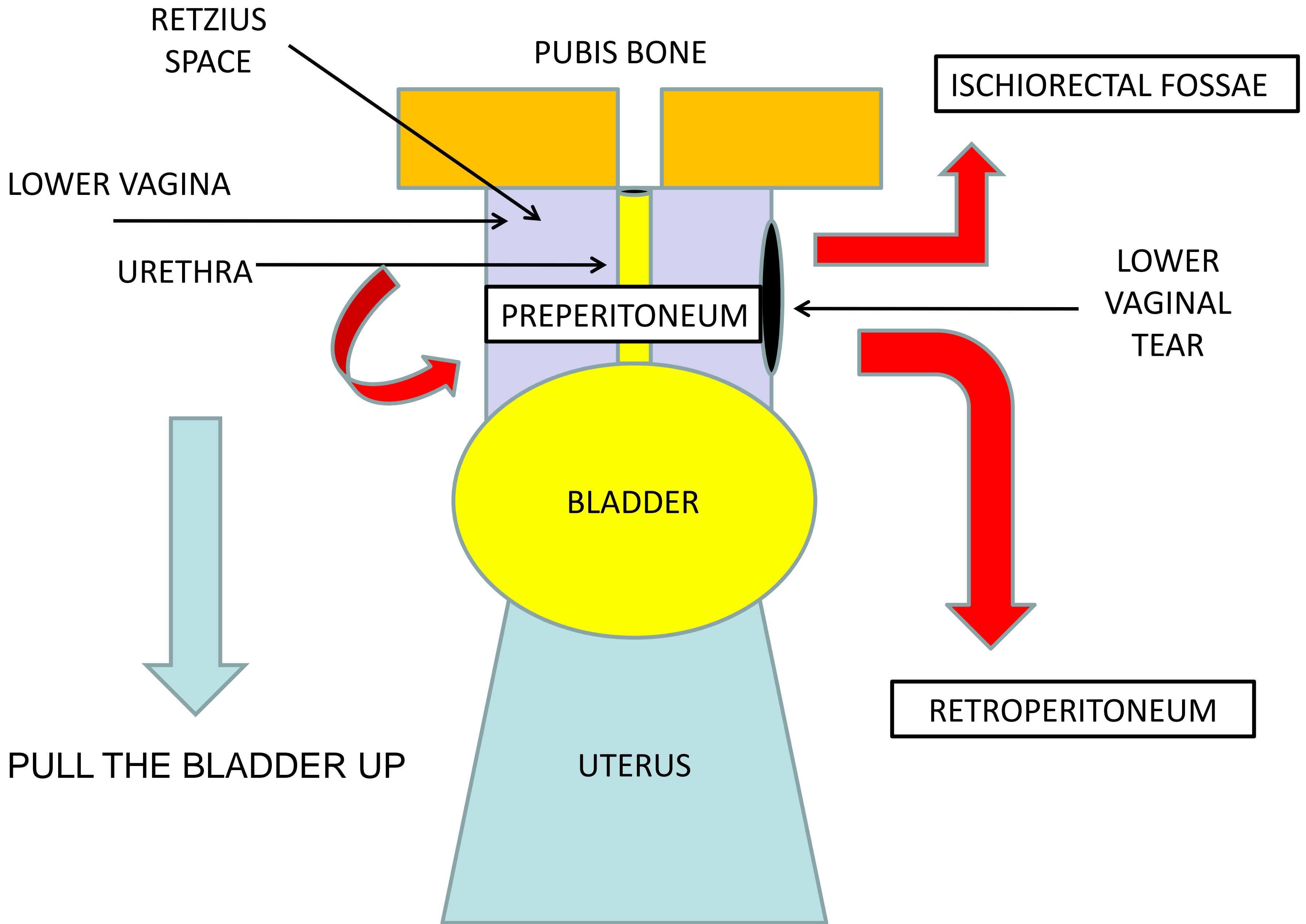

PUBIS BONE
BLADDER
VAGINA
UTERUS
RETROPERITONEAL
HEMATOMA


RETZIUS
SPACE
PUBIS BONE
ISCHIORECTAL FOSSAE
LOWER VAGINA
URETHRA
LOWER
VAGINAL
TEAR
PREPERITONEUM
BLADDER
RETROPERITONEUM
PULL THE BLADDER UP
UTERUS

CASE 1

RETROPERITONEAL WAY FROM PELVIS

CHARITÉ UNIVERSITY, CENTER FOR ANATOMY
BERLIN, GERMANY 2009

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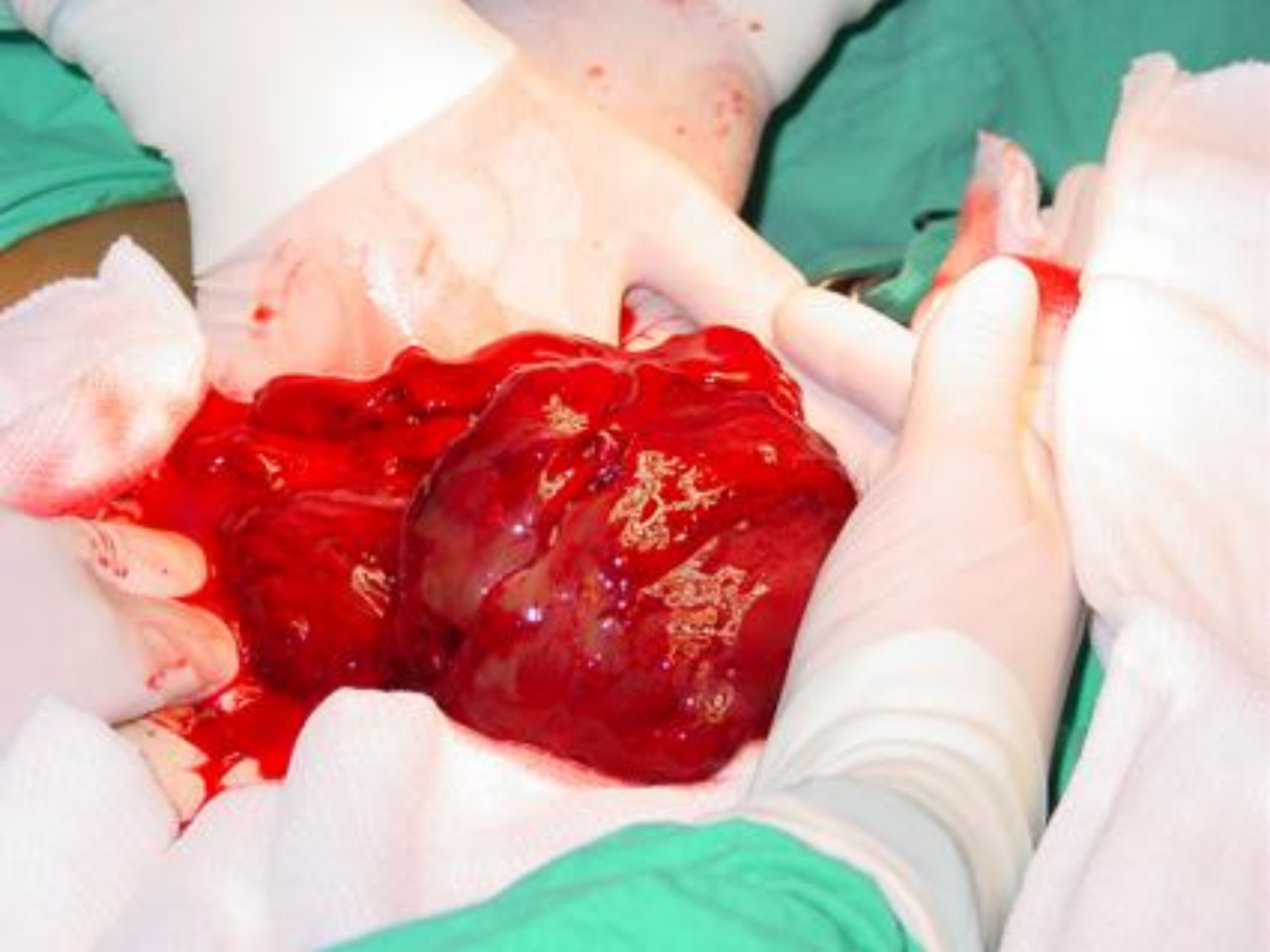

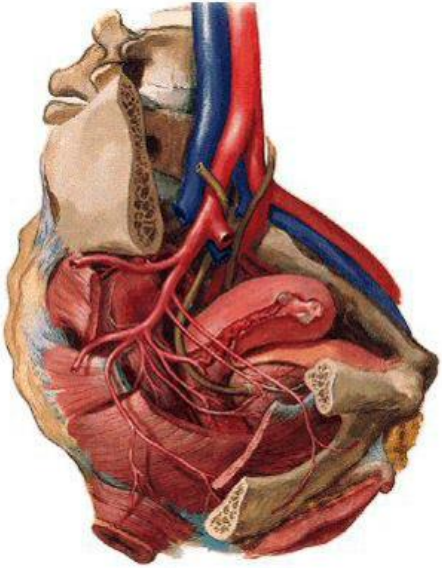

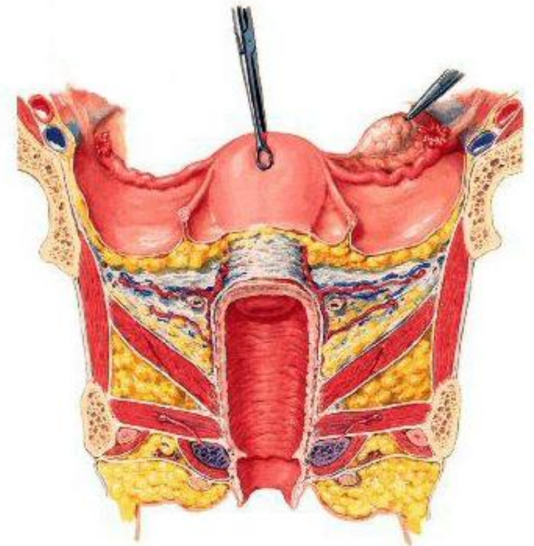

IF A TREE FALLS IN THE FOREST AND THERE IS NO ONE TO HEAR, IT MAKES NO NOISE, BUT IT FALLS ANYWAY