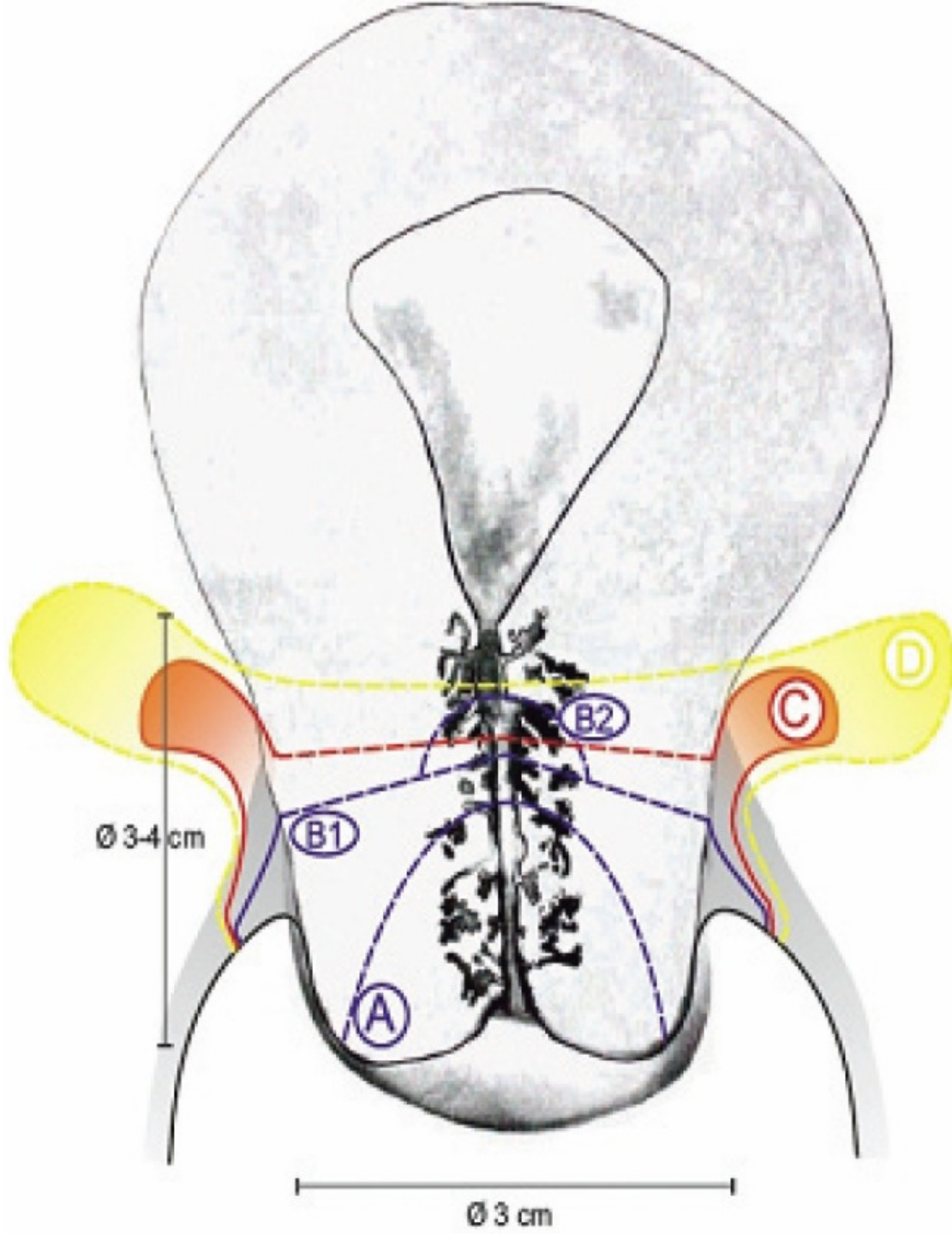




Uterine preservation in cervical cancer

P. MATHEVET,
CHU Vaudois, UNIL
Lausanne, Suisse

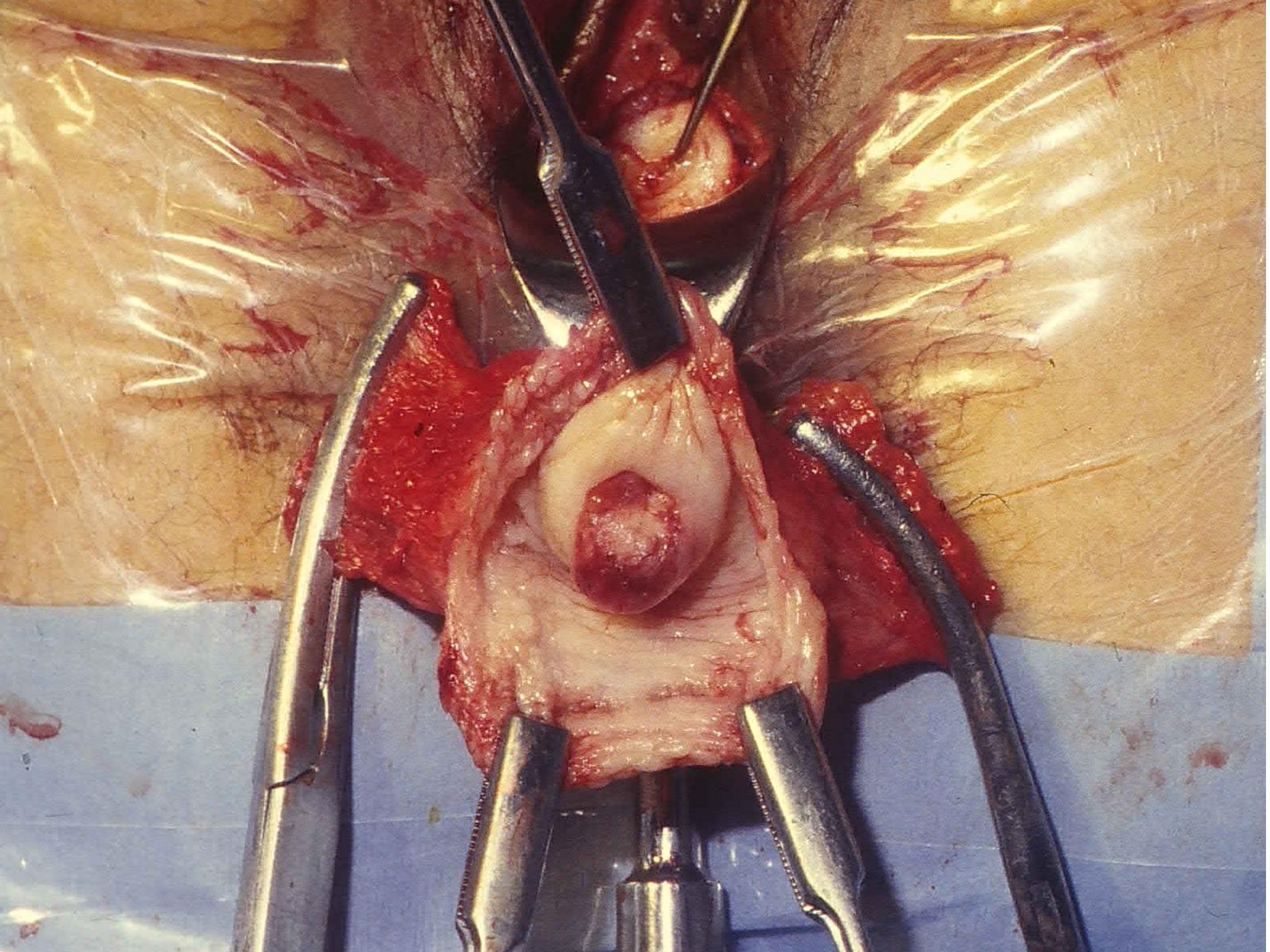


A: conization

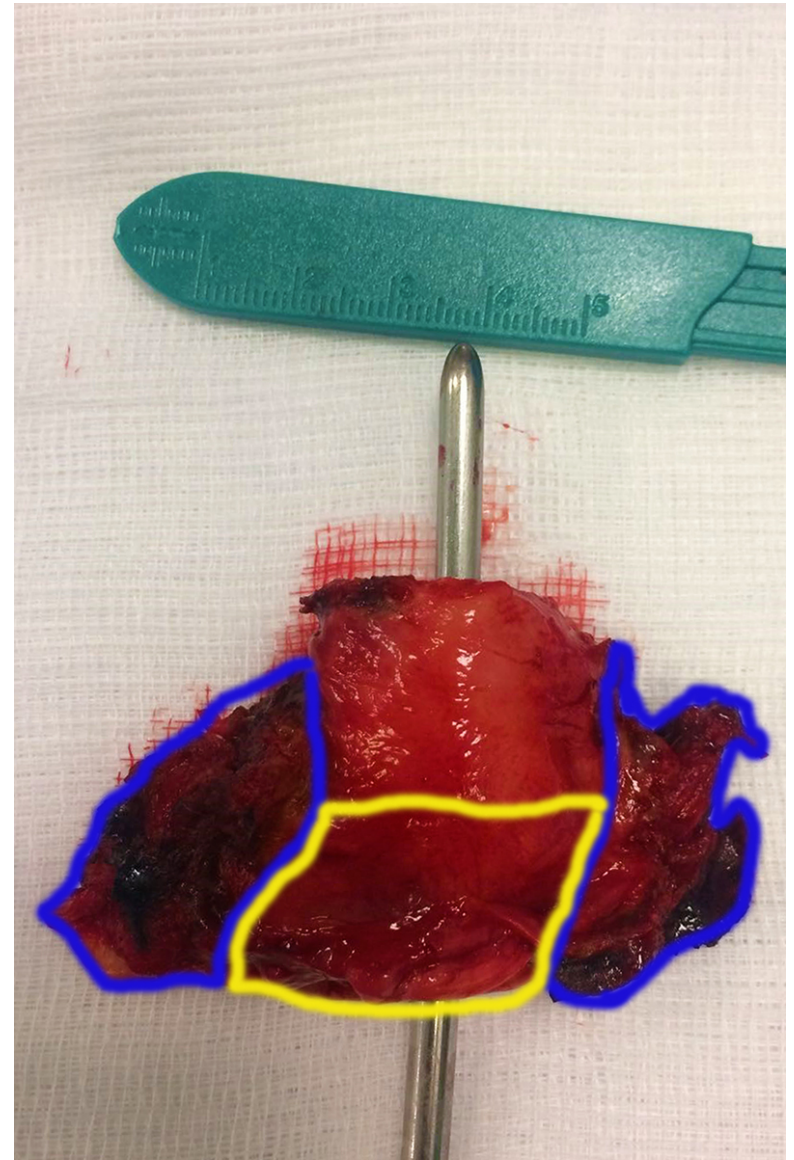
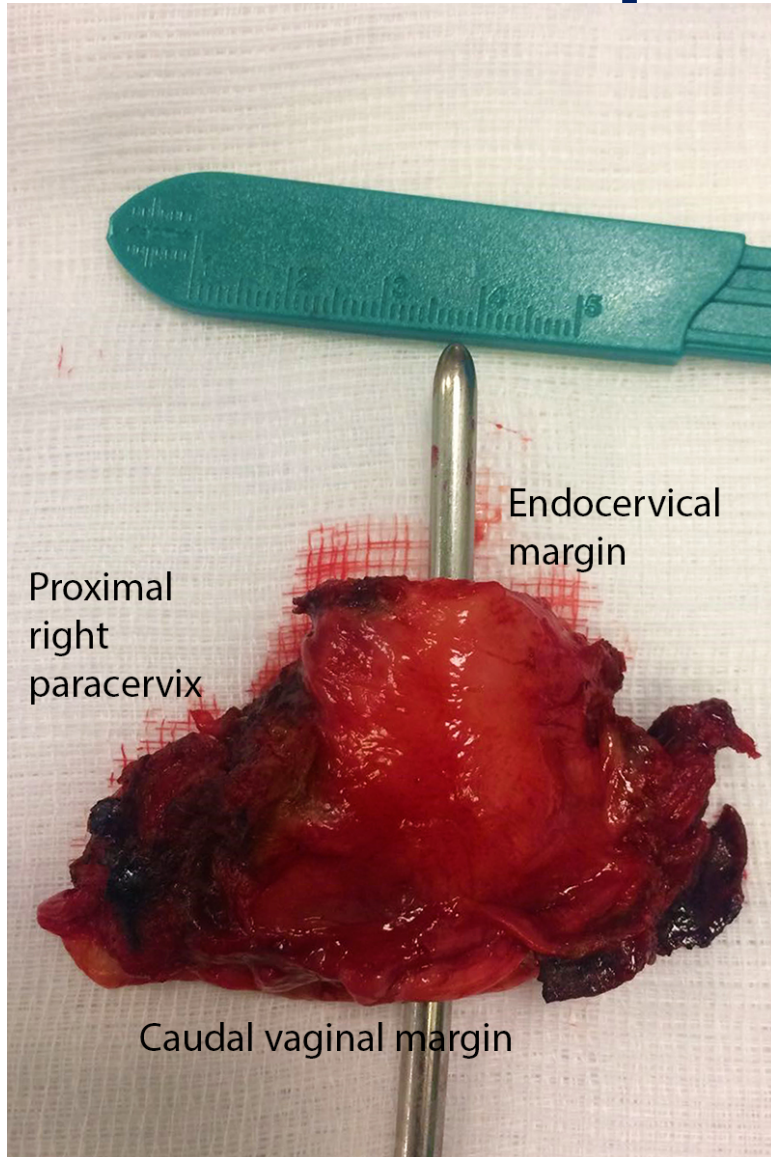
B1: trachelectomy

B2-C: proximal radical trachelectomy (Piver 2).

B2-D: distal radical trachelectomy (Piver 3)



Vaginal radical trachelectomy specimen



Radical Trachelectomy

- **Is it safe ?**
- **Is the oncologic risk increased in comparison with a traditional treatment ?**
- **What are the chances to have a healthy baby after a radical trachelectomy ?**
- **Who may benefit from this operation ?**

Lyon's experience: 1986-2011

- 160 radical trachelectomy performed (mean age = 31,5 ys).
- Initial stage (FIGO 2009):
 - IA1(+LVSI) - Ia2 = 38 cases (24%)
 - IB1 = 122 cases (76%)
- Histologic type :
 - Squamous cell carcinoma = 123 cases (77%)
 - Adenocarcinoma = 35 cases (22%)
- Tumoral diameter :
 - < 2 cm = 130 cases (81%)
 - ≥ 2 cm = 30 cases (19%)
- LVSI = 51 cases (32%)

160 Radical Trachelectomies in Lyon: Recurrences

- **9 recurrences (6 %),**
 - **1 neuroendocrine carcinoma with distant metastasis**
 - **3 recurrences in parametrium**
 - **4 lymph-nodal metastasis (lateropelvic, common iliac, para-aortic)**
 - **1 centro-pelvic recurrence (on uterine isthmus): multifocal adenocarcinoma ?**

 - **6 deaths, 2 patients free of disease**

Risk of Recurrence

In all : 5 %

Diameter < 20 mm : 1 - 2 %

Diameter > 20 mm : < 20 %

CHANCES of PREGNANCY :

- Pregnancy = 80%

- Birth of a living baby = 65%

Eligibility criteria for performing Dargent's operation

1. Squamous cell carcinoma, adenocarcinoma or adenosquamous carcinoma.
2. Stage IA2 to IB1 (FIGO 2019), tumor diameter < 2 cm
3. Willing to preserve her fertility
4. Pre-operative MRI
5. Limited endocervical extension at colposcopy or MRI
6. Vaginal approach feasible

Guidelines ESGO 2018

Negative pelvic lymph node status is the precondition for any FST

Conization and simple trachelectomy are adequate fertility-sparing procedures for stages T1a1 and T1a2, lymph node–negative, LVSI-negative patients (grade B).

Radical trachelectomy (type A) can be considered for stages T1a1 and T1a2, lymph node–negative, LVSI- positive patients. Conization or simple trachelectomy is an option (grade B).

Radical trachelectomy (type B) should be performed for patients with cervical cancer stage T1b1 equal to or less than 2 cm of the largest diameter, lymph node–negative, LVSI± (grade B).

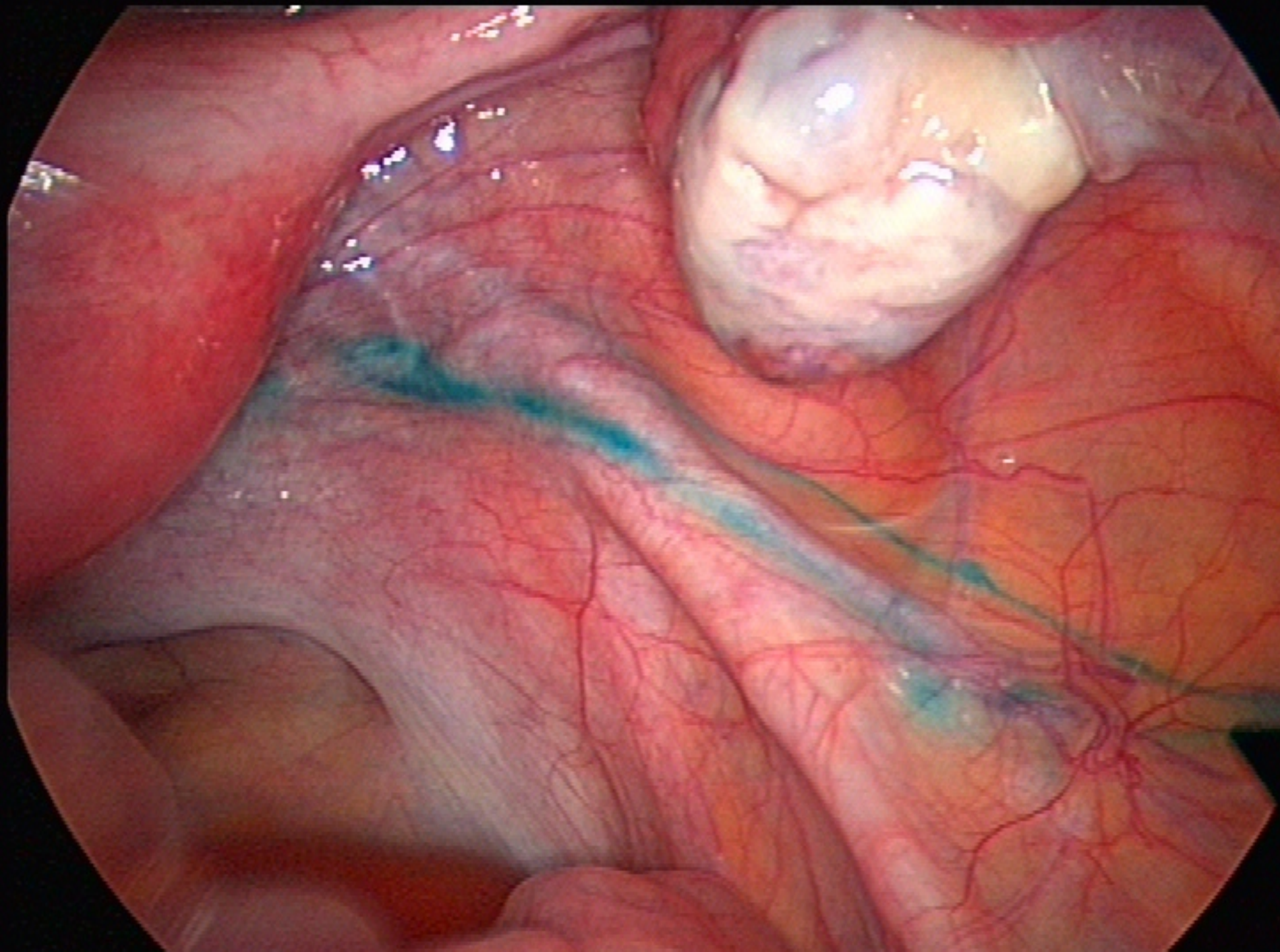
Intraoperative placement of permanent cerclage should be performed during simple or radical trachelectomy.

Fertility-sparing treatment in patients with tumors greater than 2 cm cannot be recommended and is considered as an experimental approach.

Current problems

- **Is radical trachelectomy safe in case of LVSI ?**
- **Which is the optimal approach (vaginal, laparoscopic, robotic or laparotomic)?**
- **Is parametrium resection required for early cervical carcinoma (stage IA2, stage IB1)**
- **How to offer fertility preservation for more advanced cervical carcinomas (> 2-3 cm in diameter).**

**Is radical trachelectomy
safe in case of LVSI ?**



Is LVSI a contraindication for radical trachelectomy ?

- Our experience shows that LVSI is not a prognostic factor of recurrence.
- Interest in the sentinel node (SN) technique: ultrastaging of the SN may find micrometastases that are contra-indication for fertility preservation.
- So in case of LVSI, the SN technique may help in the management choices of the lesion.

Which is the optimal approach for radical trachelectomy ?

Abdominal radical trachelectomy

- **Wethington SL et al. Int J Gynecol Cancer 2012.**
 - 101 patients
 - 28 patients (28%) treated with hysterectomy
 - 20 patients (20%) treated with adjuvant chemo or chemoradiotherapy
- **4 recurrences (4%).**
- Among the 70 without hysterectomy or radiotherapy:
 - 38 (54%) wish to be pregnant and 28 (74%) had been pregnant
 - 31 pregnancies with 16 (52%) deliveries after 32 weeks of pregnancy.

Laparoscopic radical trachelectomy

- **Park JY et al. J Surg Oncol 2014.**
 - 79 patients
 - 29 (37%) patients with tumor larger than 2 cm,
 - 12 (15%) with LVSI.
 - Median follow-up 44 months: 9 (11%) recurrences and 1 death.
 - Main prognostic factors are tumoral diameter > 2cm and stromal infiltration > 50%.
- **Ebisawa K et al. Gynecol Oncol. 2013**
 - 56 patients, 13 pregnancies
 - 5 early miscarriage, 2 late miscarriages, 47% premature birth (13 babies and 2 with neurological sequellas due to prematurity).

Robotic radical trachelectomy

- **Johansen G et al. Gynecol Oncol 2016.**
 - 56 patients (3 stage IA1, 14 stage IA2 et 39 stage IB1)
 - Mean follow-up = 24 months.
 - 7 cases canceled due to N+ or close margins.
- **2 local recurrences in the 49 (4%) radical trachelectomy cases.**
- **17 pregnancies in 21 (81%) patients**
 - 16 (94%) third trimester delivery.
 - 1 early premature delivery.

**Is parametrium resection
required for early cervical
carcinoma ?**

Reduction of the radicality of the surgery

Author	Nb cases	Type of surgery	Adjuvant	Recurrences	Preg.
Plante M.	16	Simple Trach	0	0	8
Andikyan V.	10	Conization + SN	0	0	3
Ditto A.	22	Conization + LN dissection	4 hysterec.	0 but 2/3 N+	8

The prematurity rate was significantly lower in patients who had undergone a simple trachelectomy/cone resection compared with other conservative surgeries (Review of the literature, Bentivegna E, Feril Steril 2016).

Is fertility preservation possible for more advanced cervical carcinomas ?

Fertility preservation in cervical cancer larger than 2cm in diameter

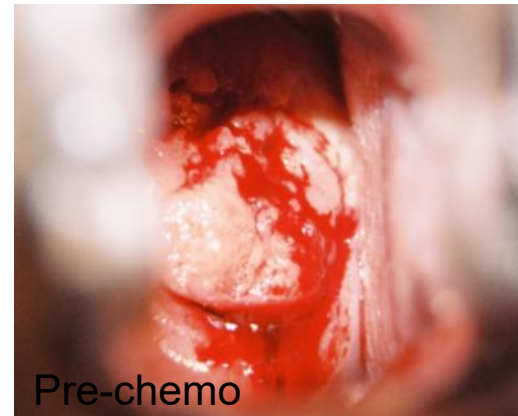
- Our experience with **neo-adjuvant chemotherapy (NACT)** before radical trachelectomy (in order to decrease the tumoral volume).
- **19 patients** treated with a mean age of **28 years** old.
 - 11 squamous carcinomas and 8 adenocarcinomas.
 - 10 stages IB2, 4 stages IIA1 et 5 stages IB3.
 - **Tumoral diameter : 29 to 51 mm** (mean = 37 mm).
 - **10 complete responses**, 7 PR and 2 stable diseases.
 - All cases treated with radical trachelectomy.
 - Median follow-up 79 months: 2 (10,5%) early recurrences (parametrium and in the Douglas pouch),
 - 4 healthy babies

Neo-adjuvant chemotherapy before Dargent's operation

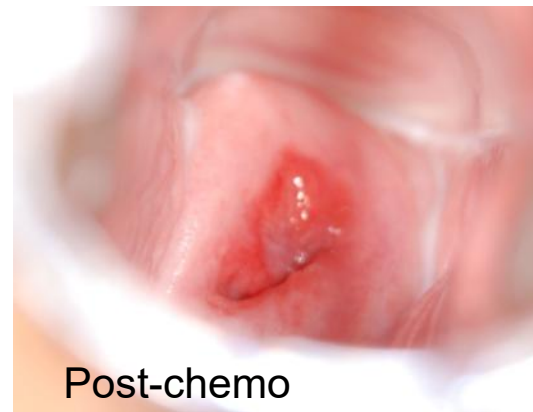
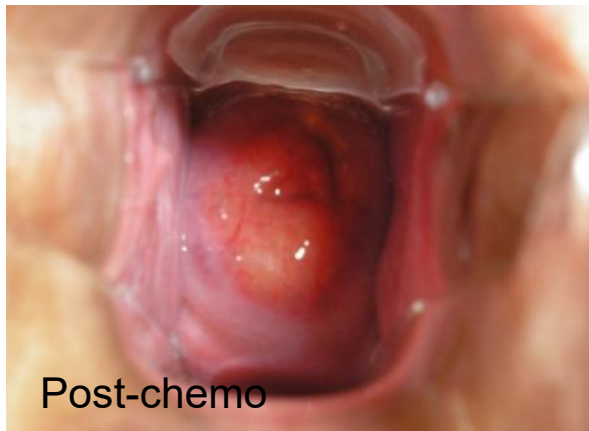
Patient 1: adenocarcinoma
Stage IB 4cm



Patient 2: squamous cell carcinoma
Stade IB2 4,5 cm



Benefit – risk ratio of this option has to be evaluated.



Conclusion for fertility preservation

**Requirement for a full information of the patient
and a share decision**

**Radical trachelectomy is as efficient as traditional
surgical treatment of early stage cervical
carcinomas**

Only 1 prognostic factor identified : tumoral volume

Future evolution:

- less radical surgery for early tumors ?**
- benefit of a neo-adjuvant chemotherapy for more
advanced carcinomas ?**

Thank you !

