ESGO European Society of Gynaecological Oncology
25th European Congress on Gynaecological Oncology
March 7-10, 2024 | Barcelona, Spain

ESGO-ESHRE-ESGE GUIDELINES ON FERTILITY SPARING TREATMENTS (AND AFTERWARDS) IN GYNECOLOGICAL CANCERS

P. MORICE, G. SCAMBIA, A. RODOLAKIS, KL TRYDE MACKLON, M. GRYNBERG,
F. PLANCHAMP
at the name of all experts

European Society for Gynaecological Endoscopy

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ESGO–SIOPE guidelines for the management of adolescents and young adults with non-epithelial ovarian cancers

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Radiotherapy and Oncology

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Guidelines

ESTRO/ESGO/SIOPe guidelines for the management of patients with vaginal cancer ☆

Remi Nout [a,*], Gabriele Calaminus [b], François Planchamp [c], Cyrus Chargari [d], Sigurd F. Lax [e], Hélène Martelli [f], W Glenn McCluggage [g], Philippe Morice [h], Maja Pakiz [i], Maximilian Paul Schmid [j], Jonáh Stunt [a], Beate Timmermann [k], Christian Vokuhl [l], Daniel Orbach [m], Christina Fotopoulou [n]

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Facts Views Vis Obgyn, 2023, 15 (1): 3-23

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ESGO/ESHRE/ESGE Guidelines for the fertility-sparing treatment of patients with endometrial carcinoma*†

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ESGO/ESHRE/ESGE Guidelines for the fertility-sparing treatment of patients with endometrial carcinoma†,‡

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Original research

OPEN ACCESS

ESGO/ESHRE/ESGE Guidelines for the fertility-sparing treatment of patients with endometrial carcinoma

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ESGO/ESHRE/ESGE Guidelines for the fertility-sparing treatment & follow-up in ovarian & cervical cancers

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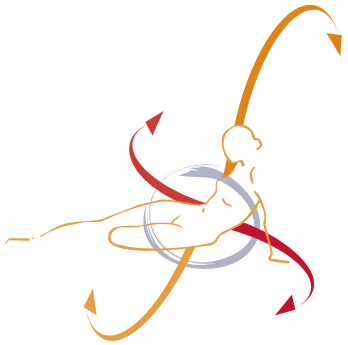

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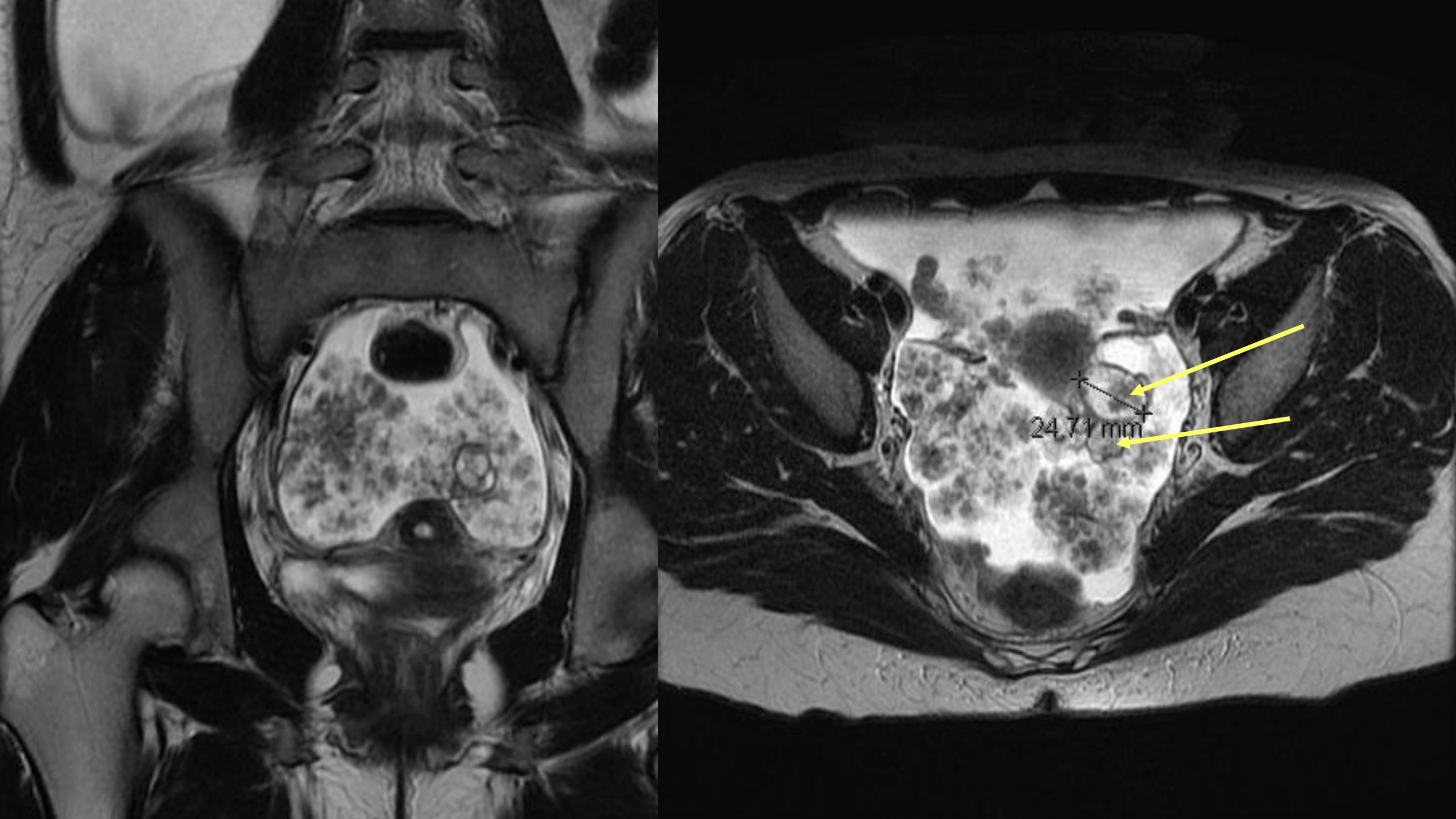
From real life to guidelines….

- Mrs X., 15 y. Bilateral ovarian tumors + ascitis
- CA 125 = 150 UI/L
- Initial laparoscopy = bilateral ovarian lesions (‘single mass’) + peritoneal pelvic implants
- Biopsies= SBOT
- Sent to me for further management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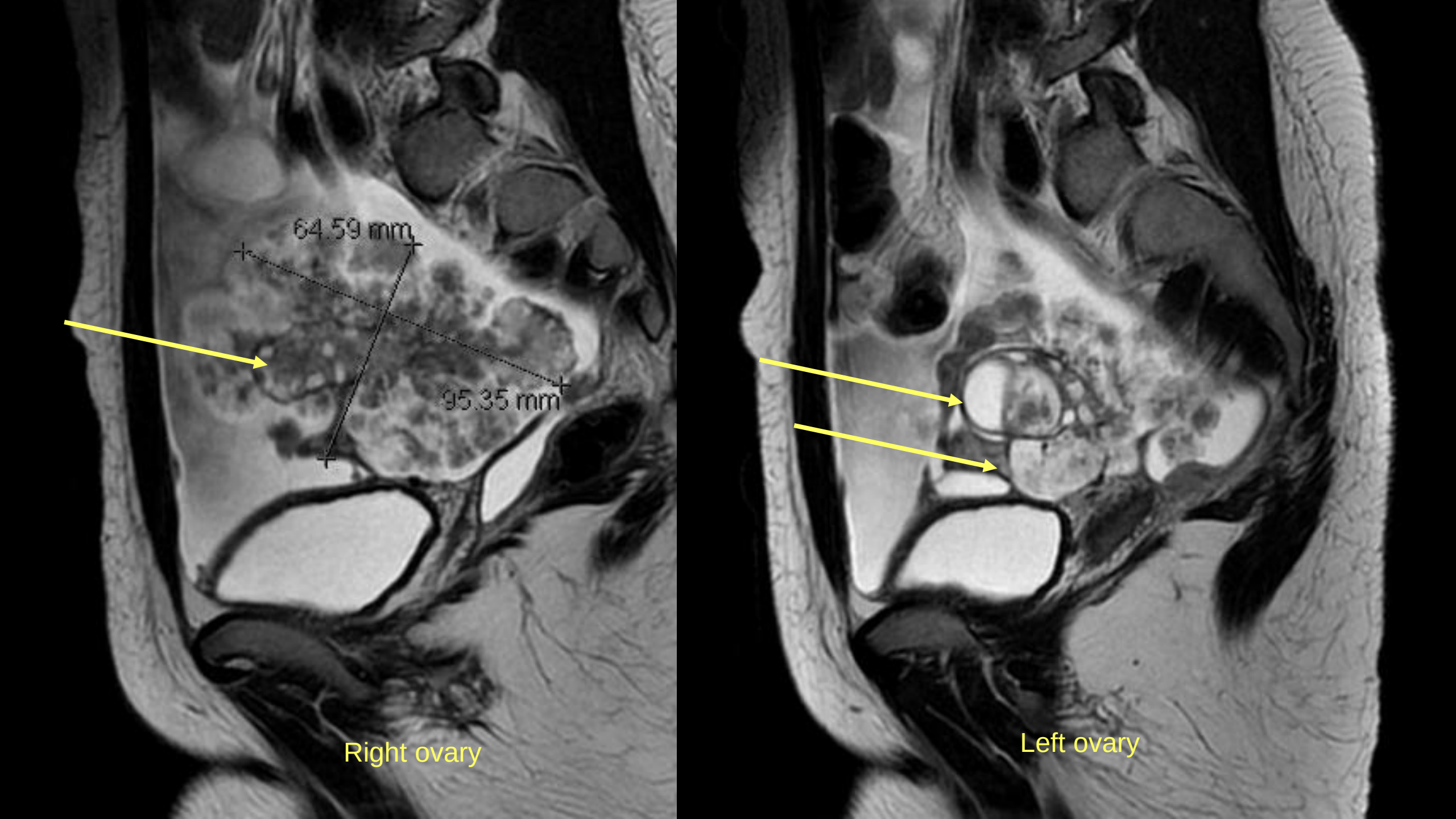
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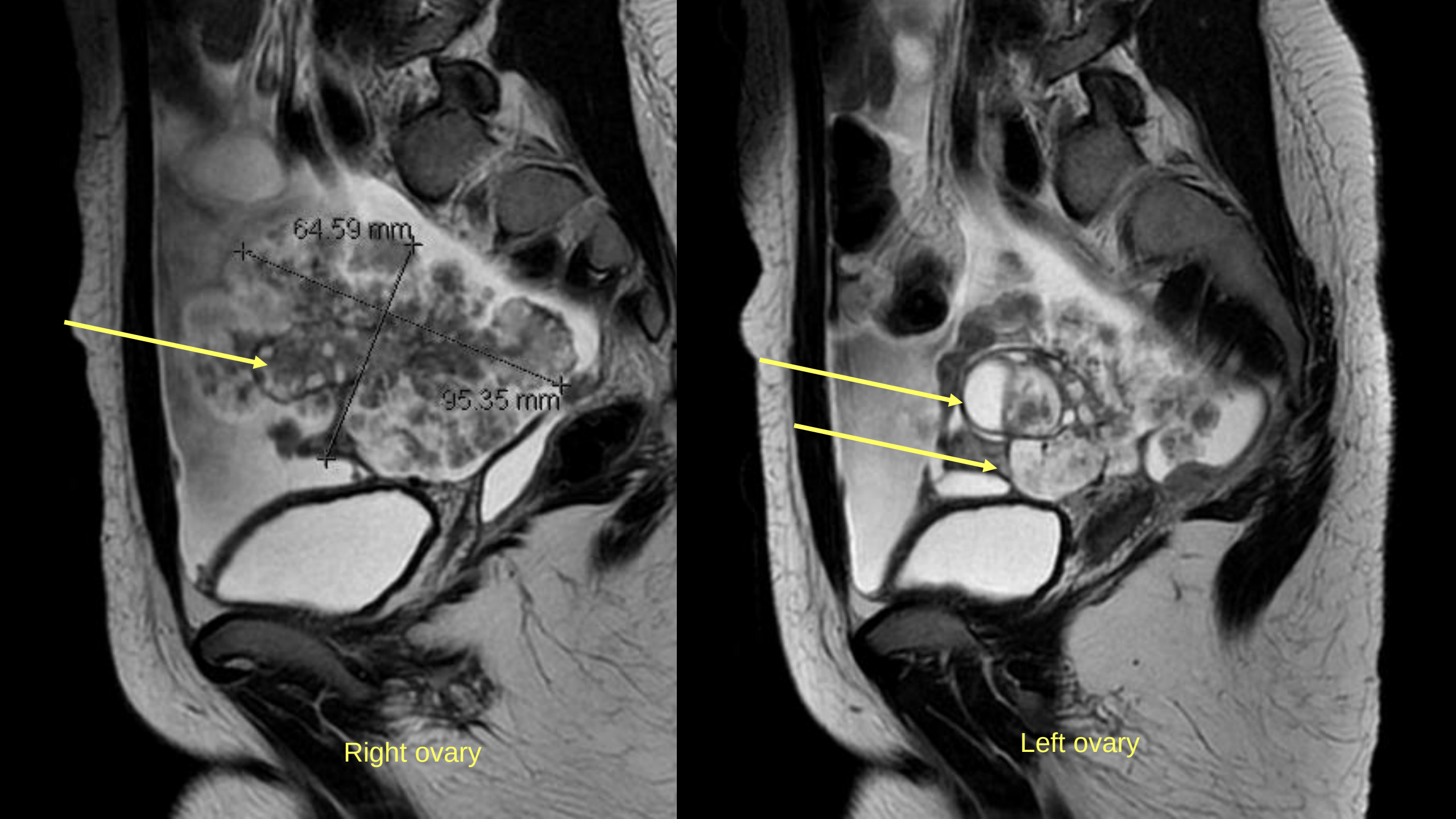
Right ovary
Left ovary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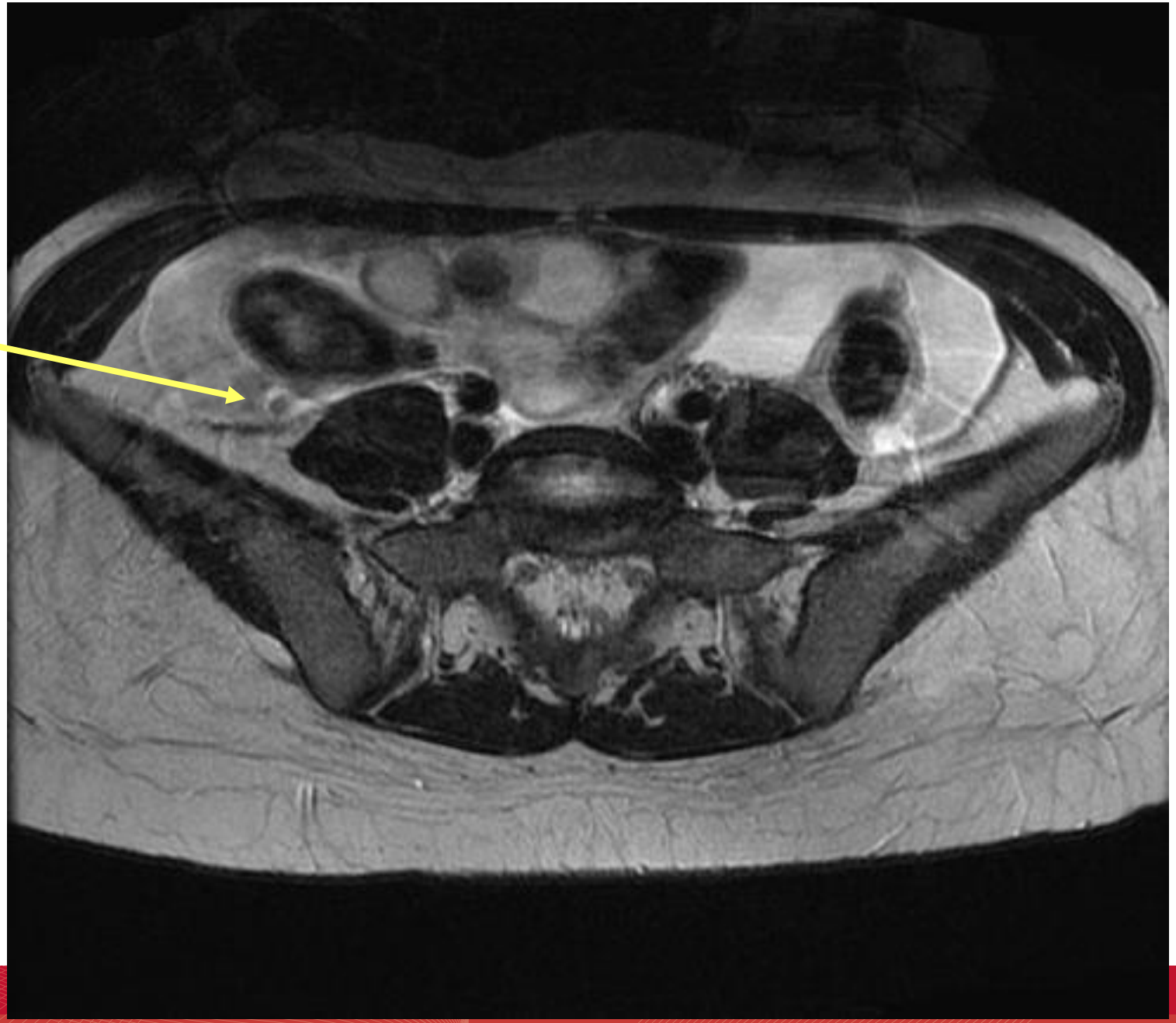

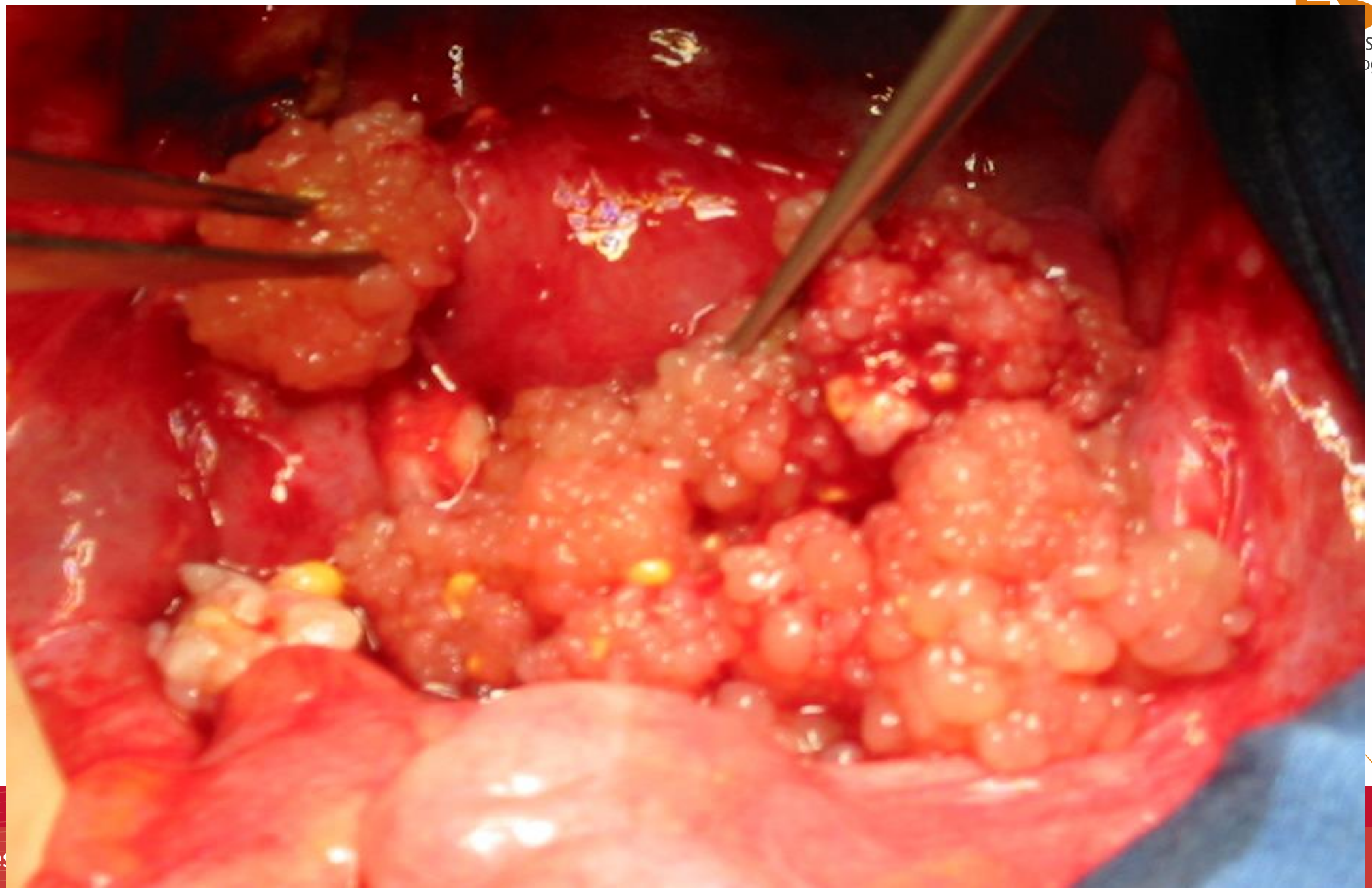

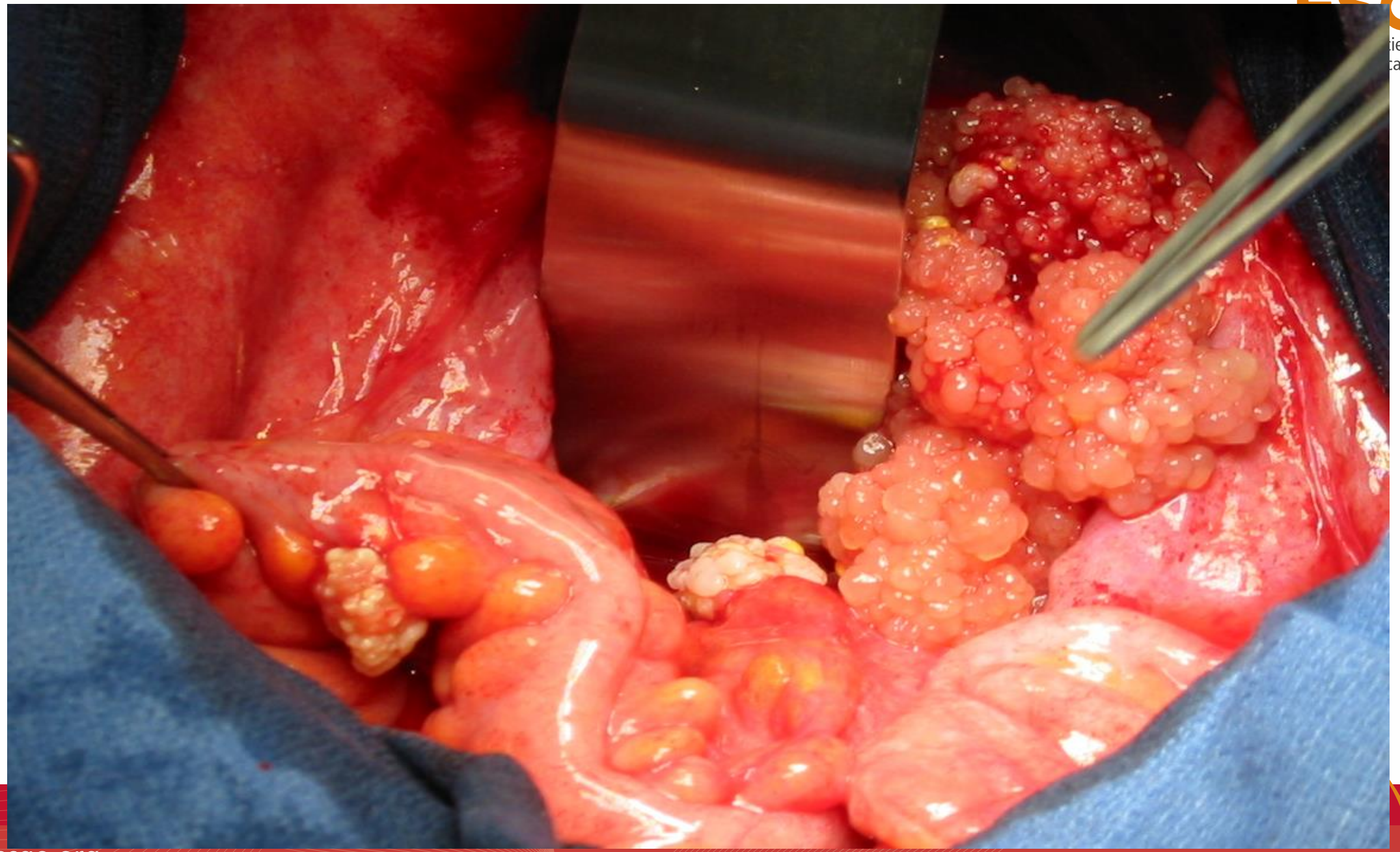

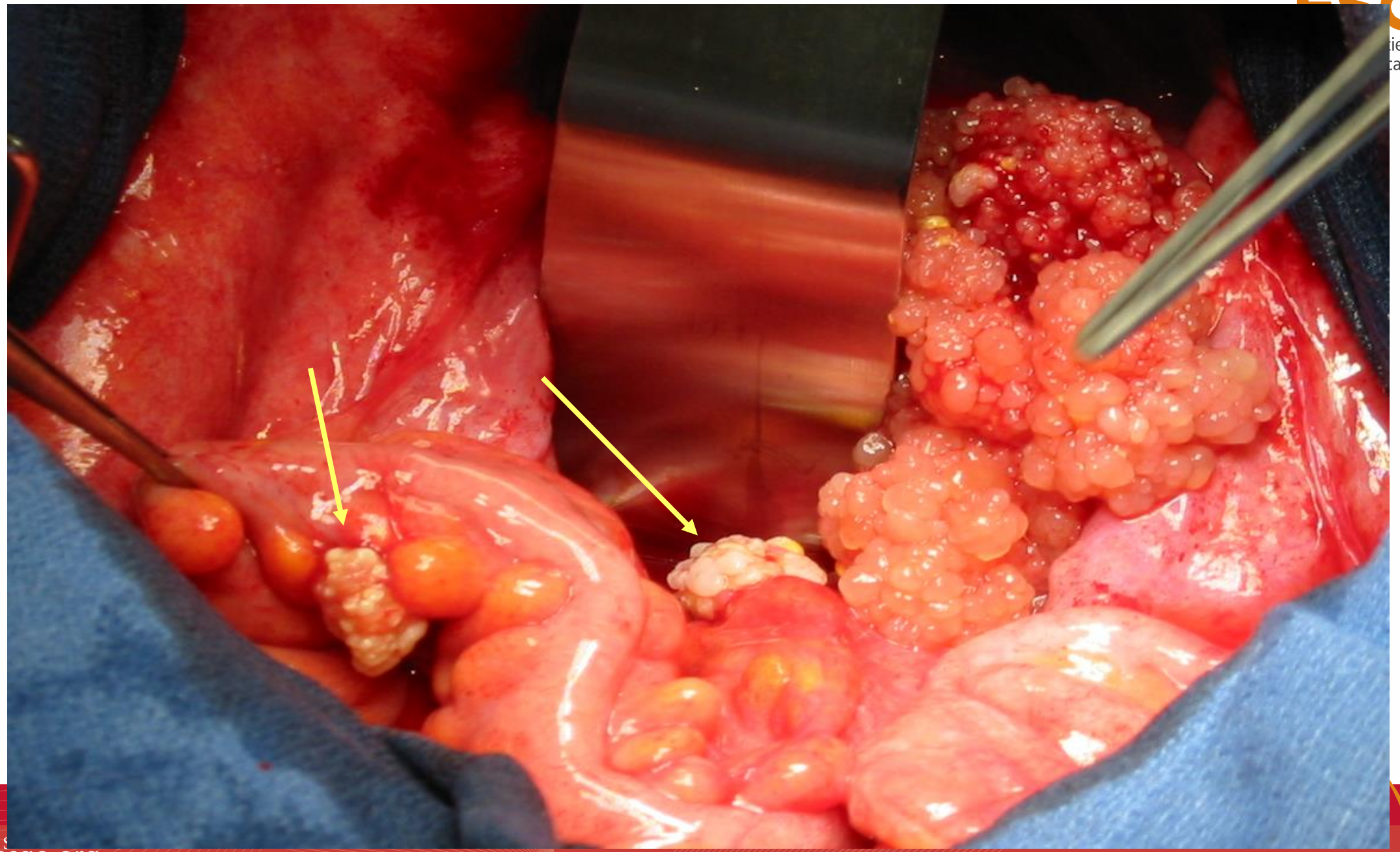

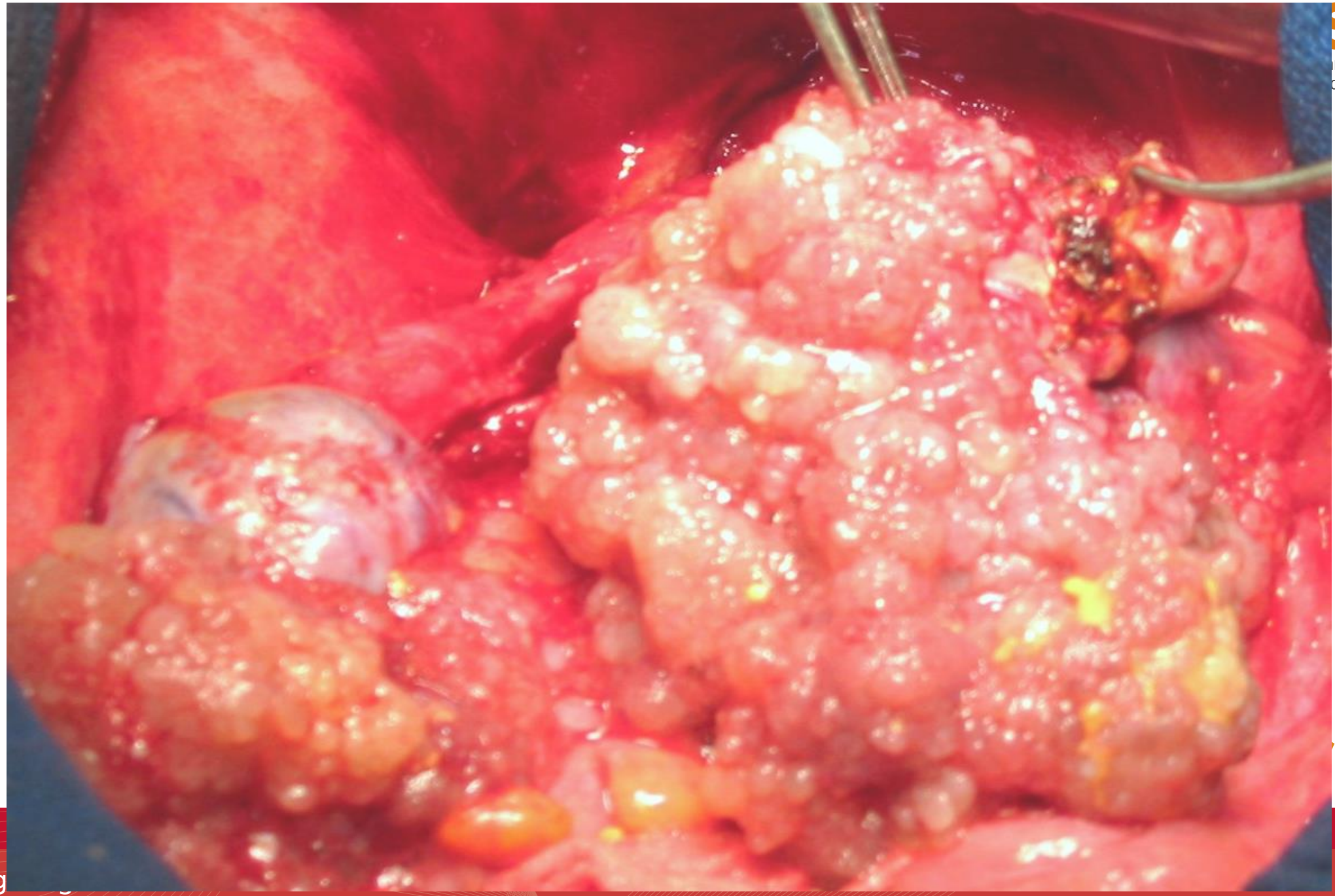

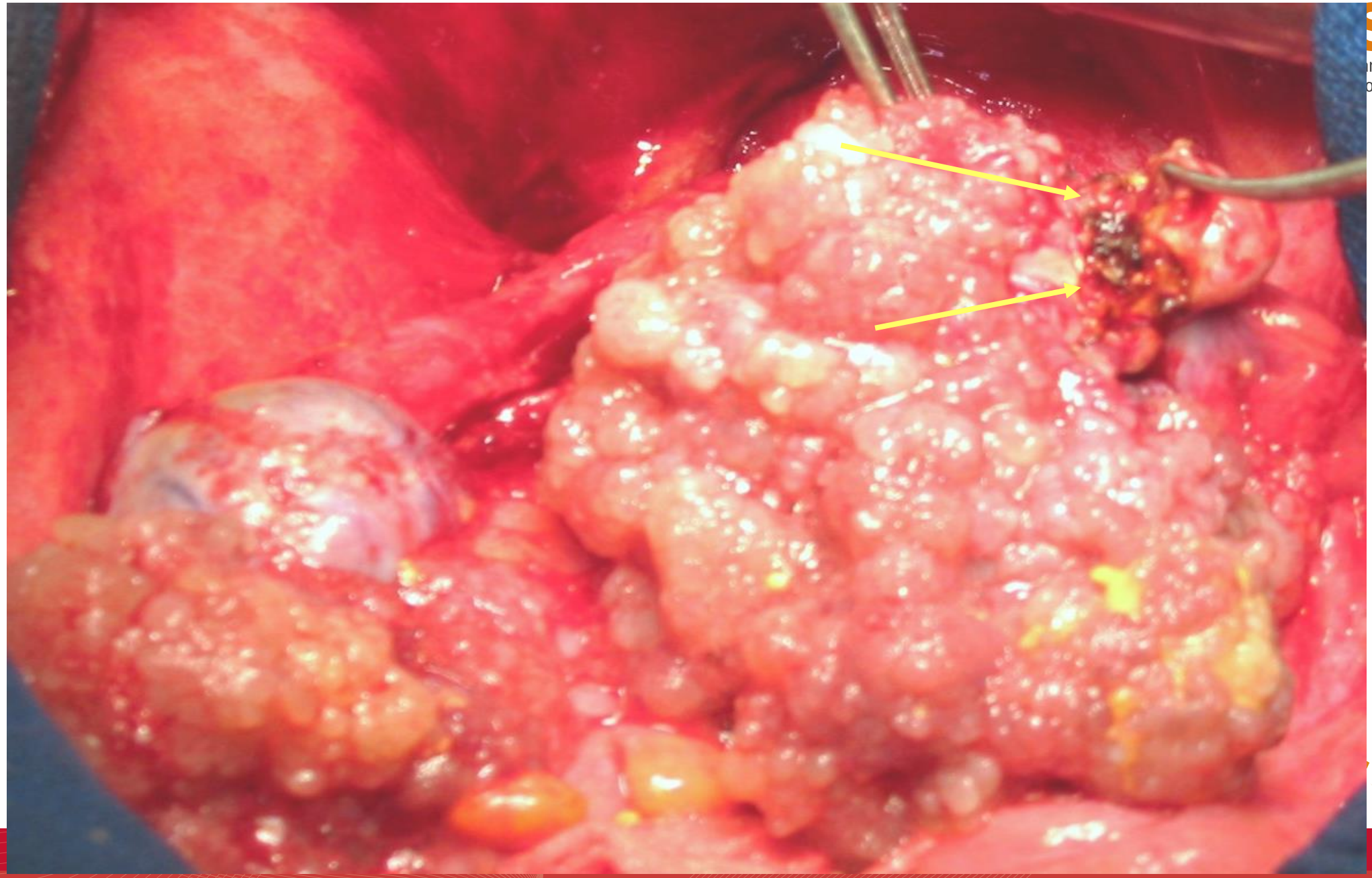

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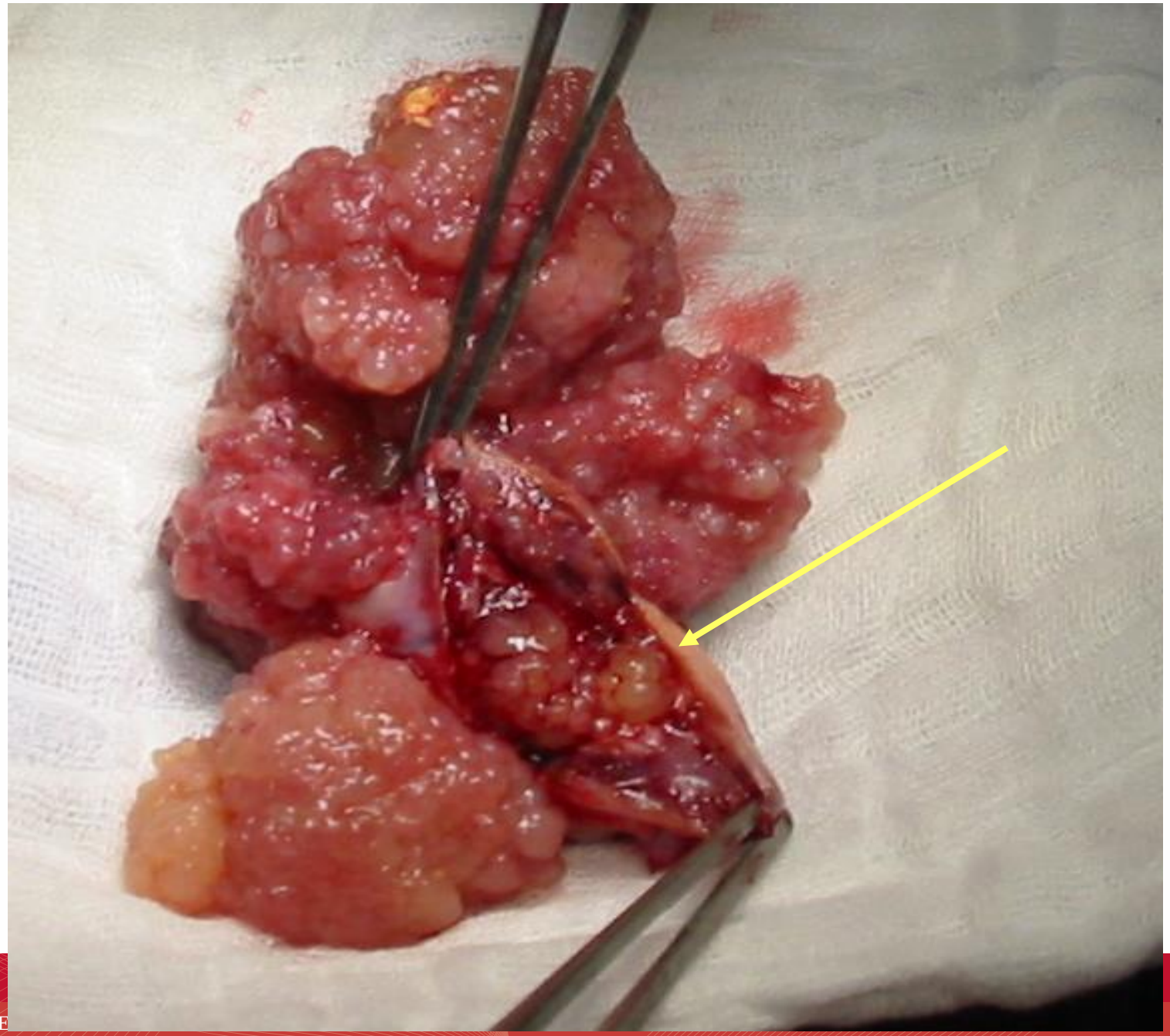
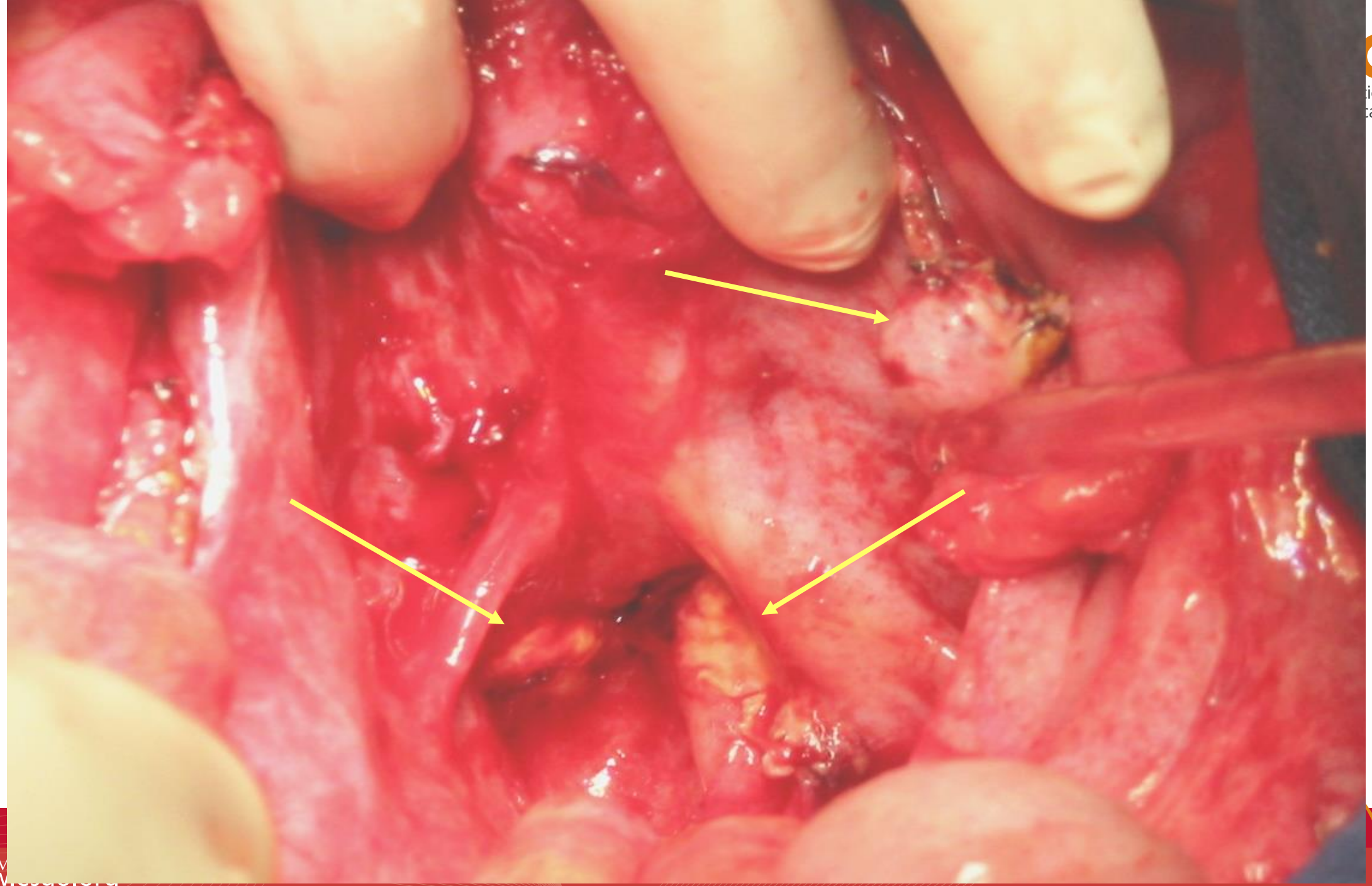
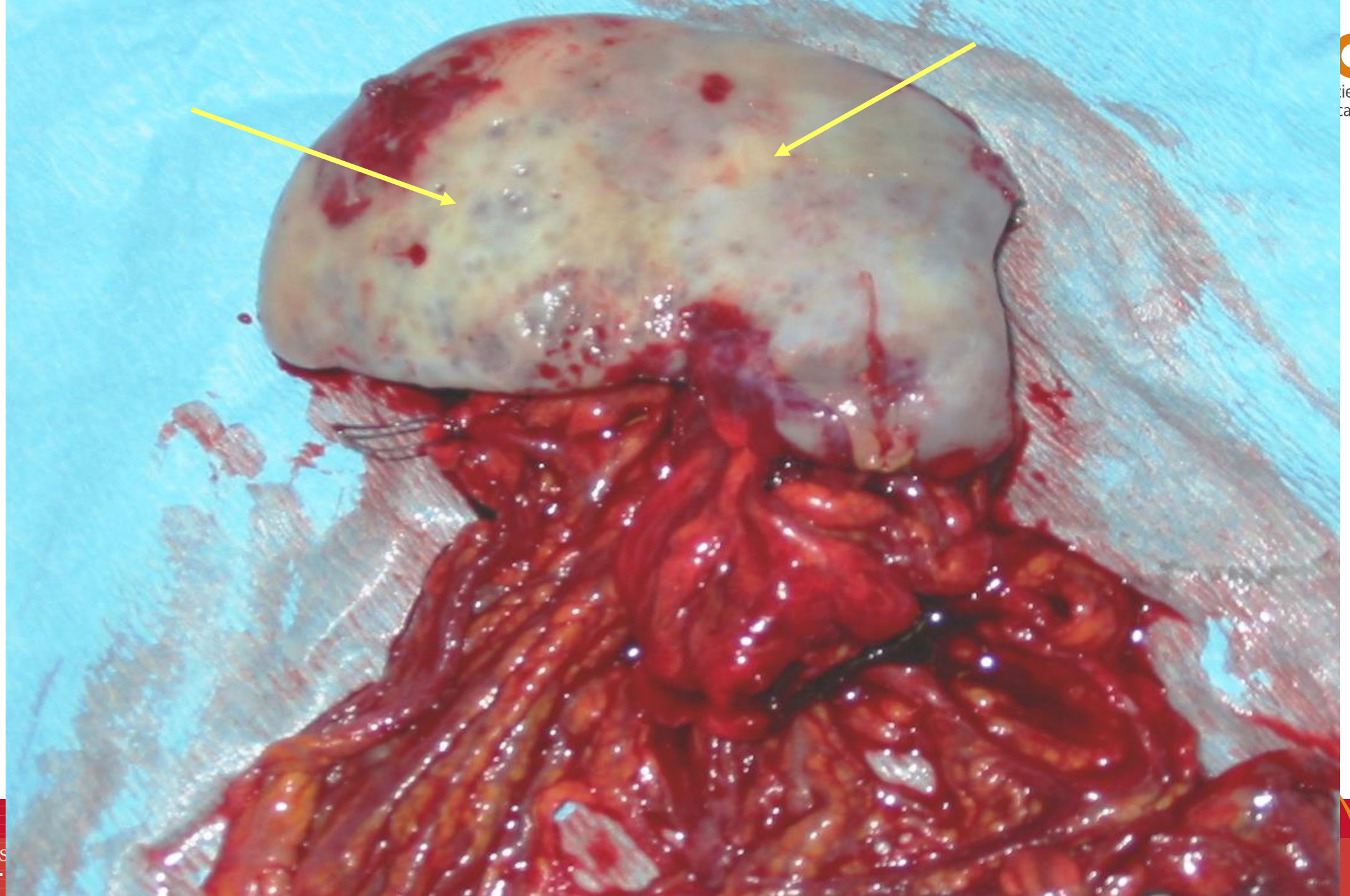
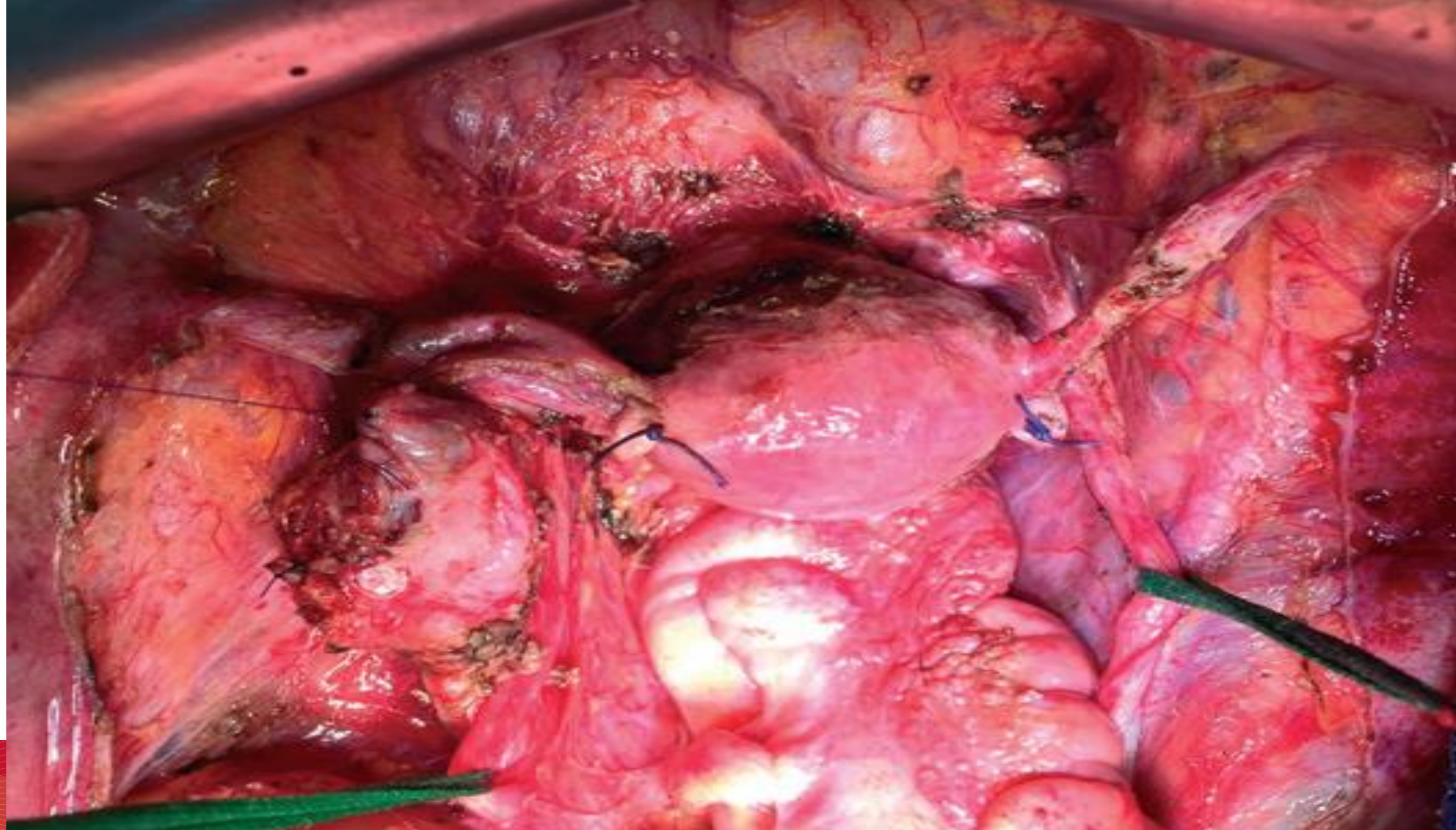
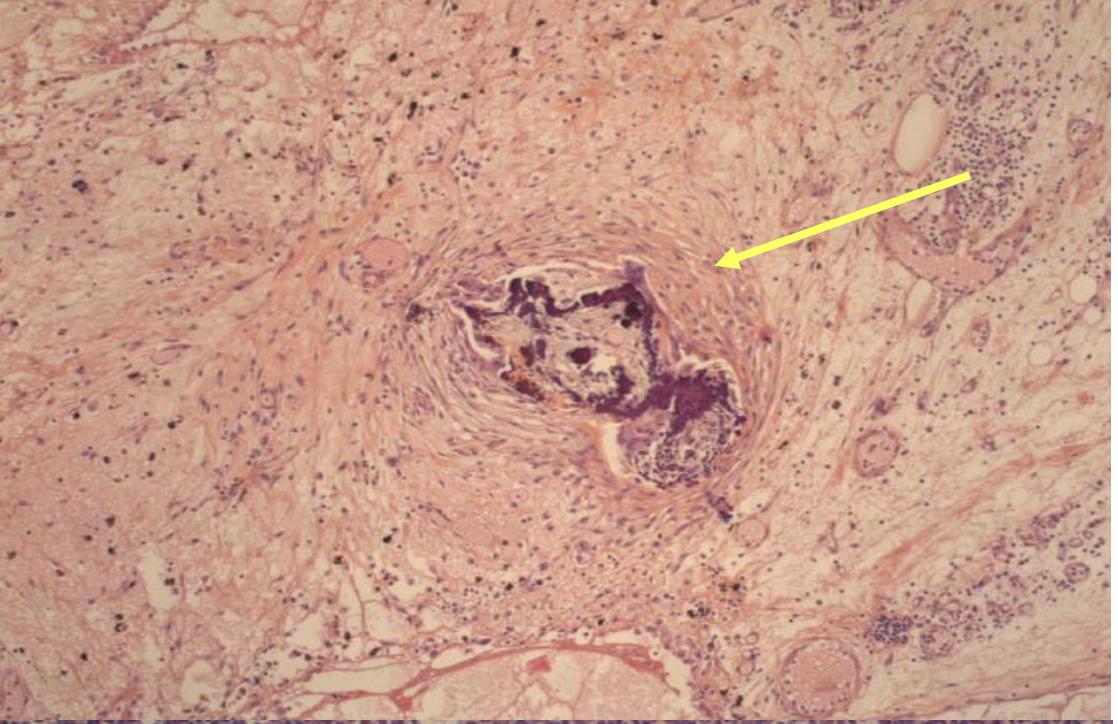




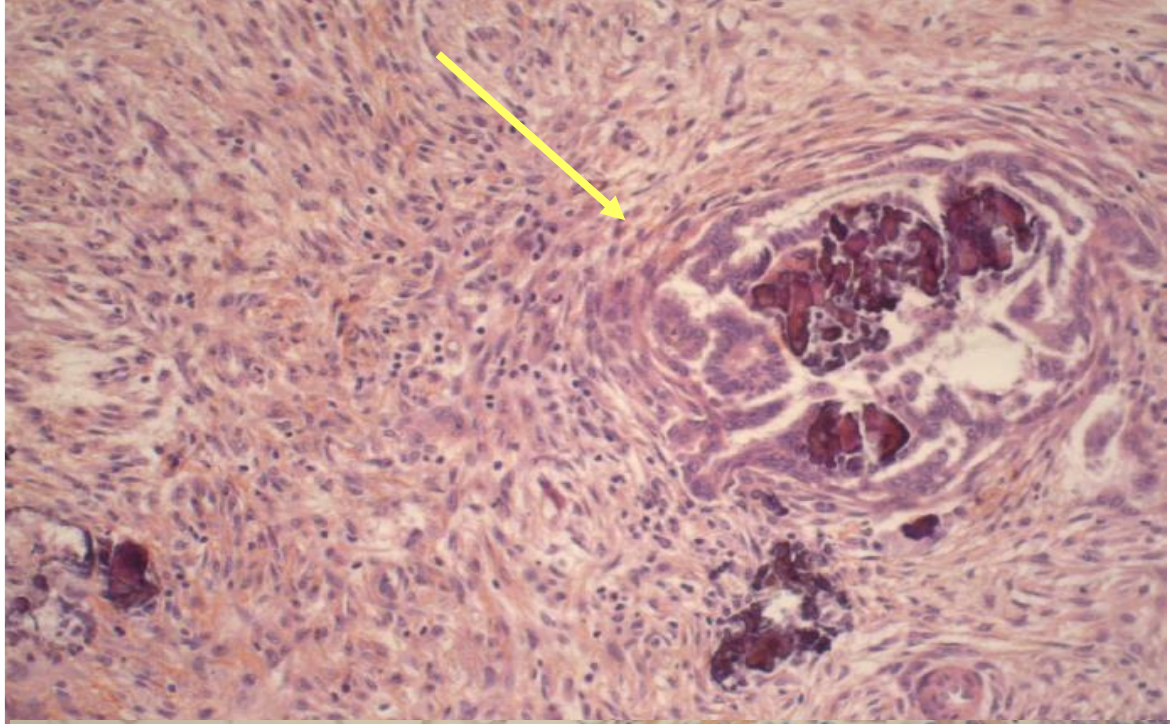


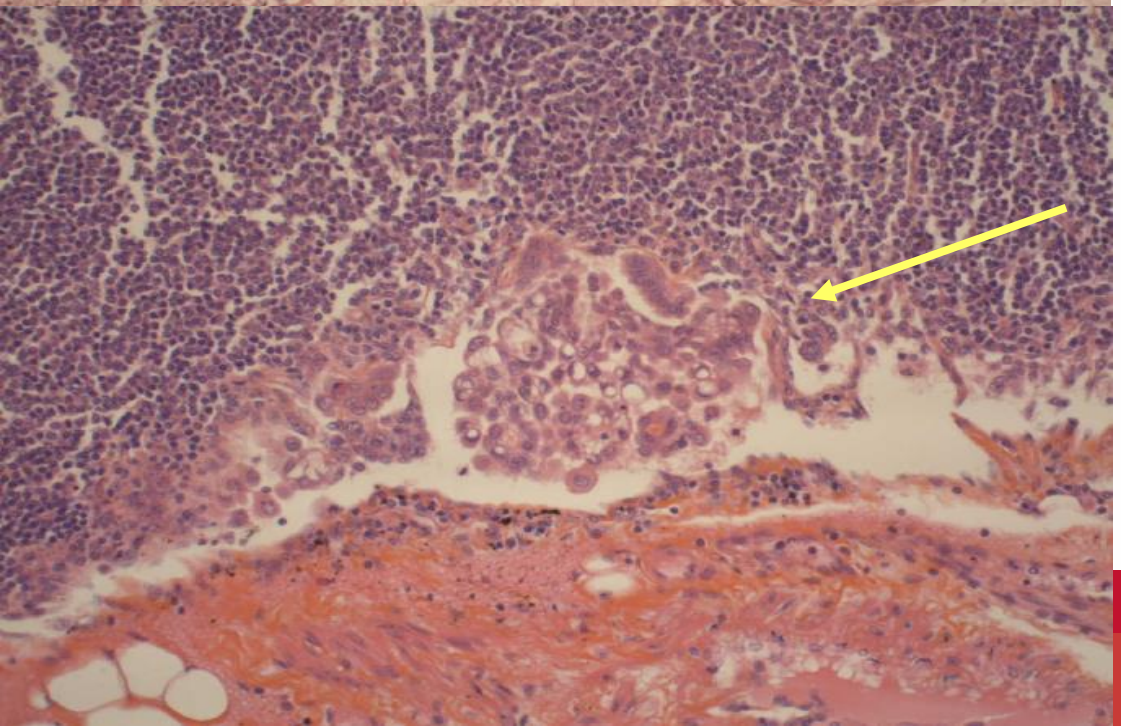


- Final histologic report: bilateral BOTs + SMI without MPP
- Multiple (noninvasive desmoplastic) implants
- 36 nodes in the omentum and spleen hilus, 8 having BOT ‘involvement’.

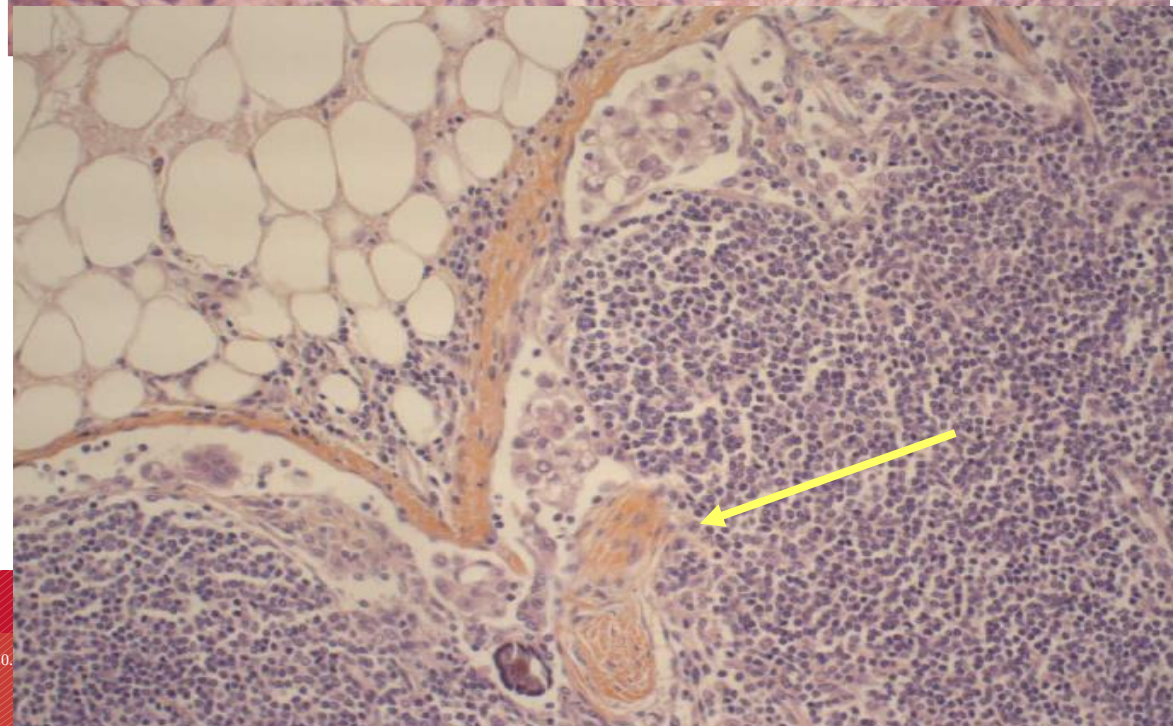


Implants





Nodes



- FU > 15 years
- 3 spontaneous pregnancies
- 1 recurrence right ovary (10 years). Laparoscopic cystectomy. BOT

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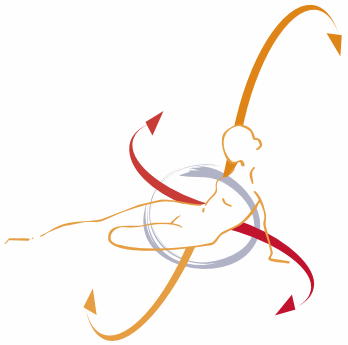

GENERAL RECOMMENDATIONS

- The aim of fertility-sparing surgery is to enable patients to get natural or assisted pregnancies with their uterus and own or donated oocytes [V, A].
- Fertility-sparing surgery and treatment planning should be performed exclusively by teams with a strong collaboration between gynecologic oncologists and reproductive medicine specialists [V, A].
- Pathologic expert review is recommended in all patients if the diagnosis and associated treatment could impair fertility [V, A].

ONCOLOGIC ASPECTS OF FERTILITY-SPARING STRATEGIES DURING THE INITIAL MANAGEMENT - OVARIAN CANCER

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Table 1- Indications for in vivo ovarian tissue preservation in ovarian neoplasms according to the histological type and the stage of the disease

STAGE	EPITHELIAL OVARIAN NEOPLASMS								NON-EPITHELIAL OVARIAN NEOPLASMS				
	BOT[1]	LGSC	LGEC	MC_{exp}	CCC	HGSC	HGEC	MC_{inf}	GCT[2]	SCC	GrCT	SLCT[3]	SLCT[4]
IA													
IB													
IC1													
IC2												##	
IC3												##	
II-IV									#				

Favourable oncologic selection criteria for fertility-sparing management as defined in the text (based on the favourable survival and/or recurrence rates observed in cohorts and/or comparative studies (radical versus conservative) of patients treated with such characteristics).

Oncologic selection criteria acceptable in selected cases (insufficient or conflicting data to evaluate accurately the results of the ovarian preservation in this subgroup of patients).

Unfavourable oncologic selection criteria for ovarian preservation (poorest survival observed in patients having an ovarian preservation in these subgroups. It could be related to the use of ovarian preservation itself and/or the natural history of the disease (whatever the preservation or not of the ovary) in these patients having poorest prognostic factors).

[1]non-invasive peritoneal implants; [2]including immature teratoma, dysgerminoma, Yolk-sac tumours; [3]well and moderately differentiated; [4]poorly differentiated; #for grade 2-3 immature teratoma stage II-IV, fertility-sparing data are limited; ## for Sertoli-Leydig cell tumour stage IC2-3, fertility-sparing data are limited; BOT borderline ovarian tumour; CCC clear cell carcinoma; GCT germ cell tumour; GrCT granulosa cell tumour; HGEC high-grade endometrioid carcinoma; HGSC high-grade serous carcinoma; LGSC low-grade serous carcinoma; LGEC low-grade endometrioid carcinoma, MC_{exp} mucinous carcinoma with expansile invasion, MCinf mucinous carcinoma with infiltrative invasion; SCC small cell carcinoma; SLCT Sertoli-Leydig cell tumour.

ONCOLOGIC ASPECTS OF FERTILITY-SPARING STRATEGIES DURING THE INITIAL MANAGEMENT - OVARIAN CANCER

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General recommendation

- If bilateral oophorectomy is needed, uterine-sparing surgery can be considered assuming normal endometrial (preferably evaluated by hysteroscopy) and serosal evaluation [IV, B].

Salpingo-oophorectomy vs. cystectomy in selected cases of borderline ovarian tumours

- Bilateral ovarian cystectomy with macroscopic healthy ovarian tissue sparing in bilateral serous and sero-mucinous borderline ovarian tumours can be considered [IV, B].

- Unilateral salpingo-oophorectomy and cystectomy with macroscopic healthy ovarian tissue sparing are both acceptable strategies for unilateral serous and sero-mucinous borderline ovarian tumour. In case of cystectomy, patients should be counseled about the risk of local/ovarian recurrence of up to 30% with no impact on overall survival, but better fertility results [IV, B].

OPTIMISATION OF FERTILITY RESULTS AND INFERTILITY MANAGEMENT IN GYNAECOLOGICAL ONCOLOGY PATIENTS

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Reproductive medicine specialist consultation

- Women who wish to preserve their fertility should be offered reproductive counseling before the beginning of any oncological treatment [IV, B].

- The reproductive medicine specialist should be part of the treatment decision process and therefore be consulted when treatment plans are changing and/or family planning starts. Creation of a specific multidisciplinary team is encouraged [V, A].

OPTIMISATION OF FERTILITY RESULTS AND INFERTILITY MANAGEMENT IN GYNAECOLOGICAL ONCOLOGY PATIENTS

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How to evaluate ovarian function in gynaecological oncology patients before cancer treatment?

- The assessment of ovarian reserve should be done with the same methods as in healthy women (serum anti-Müllerian hormone (AMH), antral follicle count (AFC)), although the interpretation of results may be difficult in patients with ovarian tumours [V, B].

- Age of the patient is more important than AMH and AFC in planning fertility-sparing treatment. Pre-treatment ovarian reserve markers alone should not be used as treatment guide for fertility-sparing surgery [IV, D].

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Fertility preservation methods in first line treatment settings - Ovarian tumours

- Ovarian stimulation followed by egg retrieval can be offered to ovarian cancer patients with favourable prognostic factors taking into account histologic diagnosis, hormone-sensitivity, stage, and oncologic prognosis (see Table 1) [IV, C].

- Ovarian stimulation followed by egg retrieval for fertility preservation is not recommended before final histological confirmation of a possibly malignant/borderline ovarian mass [V, D].

- For primary ovarian neoplasms, it is recommended that ovarian stimulation and oocyte cryopreservation to be performed after completing staging surgery and determining the histologic diagnosis, hormone-sensitivity, stage, and oncologic prognosis (see Table 1) [IV, B].

- Ovarian tissue freezing and immature oocytes retrieval for ex-vivo in vitro maturation and further mature oocyte vitrification during surgery in case of bilateral oophorectomy could be offered [V, C].

- Ovarian stimulation followed by oocyte retrieval is not contraindicated in patients previously treated for stage I ovarian borderline tumours even in case of abnormal appearing residual ovary that will be subjected to stimulation [V, D].

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Fertility preservation methods in first line treatment settings - Ovarian tumours *(continued)*

- Ovarian stimulation followed by oocyte retrieval (even in case of abnormal appearing residual ovary) is not contraindicated in patients with advanced stage ovarian borderline tumours as long as there has been a complete resection and pathologic evaluation (confirming non-invasive implants) of visible peritoneal lesions [V, D].

- In case of borderline ovarian tumour, biomarkers of the tumour (BRAF, estrogen receptor, KRAS, etc.) should not be used as a contraindication for considering ovarian stimulation (indication and protocol) [V, D].

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Fertility preservation methods in case of recurrence of borderline ovarian tumours

- Fertility evaluation for patients with apparent recurrent borderline ovarian tumours who wish to preserve their fertility is mandatory prior to any treatment in gynecologic oncology centres with comprehensive multidisciplinary expertise within a multidisciplinary team, including a reproductive medicine specialist [V, A].

- Ovarian stimulation followed by oocyte retrieval in case of recurrent stage I borderline ovarian tumour with no evidence of peritoneal disease is feasible before potential definitive surgery [V, C].

- Ovarian stimulation followed by oocyte retrieval in case of recurrent advanced stage borderline ovarian tumours is feasible as long as there has been a complete resection and pathologic evaluation (confirming non-invasive implants) of visible peritoneal lesions and normal appearing abdomino-pelvic imaging (CT scan or MRI) suggesting the absence of obvious implants before the eventual stimulation [V, C].

WISH OF A PREGNANCY AND AFTERWARDS

WISH OF A PREGNANCY AND AFTERWARDS

When to give the "oncological authorization" to the patients/couple?

- All patients with borderline ovarian tumours or epithelial/non-epithelial tumours should be advised according to the age of the patient, stage of disease, pathology, uni- or bilateral localization of the tumour as well as mode of surgery (cystectomy vs. oophorectomy) [IV, A].

- Spontaneous pregnancies can be encouraged in borderline ovarian tumour patients immediately after the fertility-sparing surgery [IV, B].

- Patients needing fertility treatment can be referred for ART in case of a low stage borderline ovarian tumour immediately after fertility-sparing surgery [IV, B].

- Patients needing fertility treatment can be referred for ART in case of advanced stage borderline ovarian tumour after complete resection and absence of invasiveness of implants immediately after fertility-sparing surgery [IV, B].

WISH OF A PREGNANCY AND AFTERWARDS

Ovarian cancer - Need for a completion surgery after childbearing

- Routine completion surgery (remaining ovary) is not recommended in borderline ovarian tumours patients [IV, D].

Ovarian cancer - Indications and modalities for HRT after completion surgery or bilateral salpingo-oophorectomy plus uterine preservation

- HRT can be offered after completion surgery to patients with borderline ovarian tumours and ovarian cancer after discussing risks and benefits and taking into account the histological subtype [IV, B].

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