

看似婦科癌症的非癌症狀況

Non-Cancerous Conditions Mimicking Gynecologic Malignancies

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Outline

- ◆ **Examples**
- ◆ **Managements**
- ◆ **Functional imaging**
- ◆ **Risk-stratification system**
- ◆ **Conclusions**

Condyloma Acuminatum

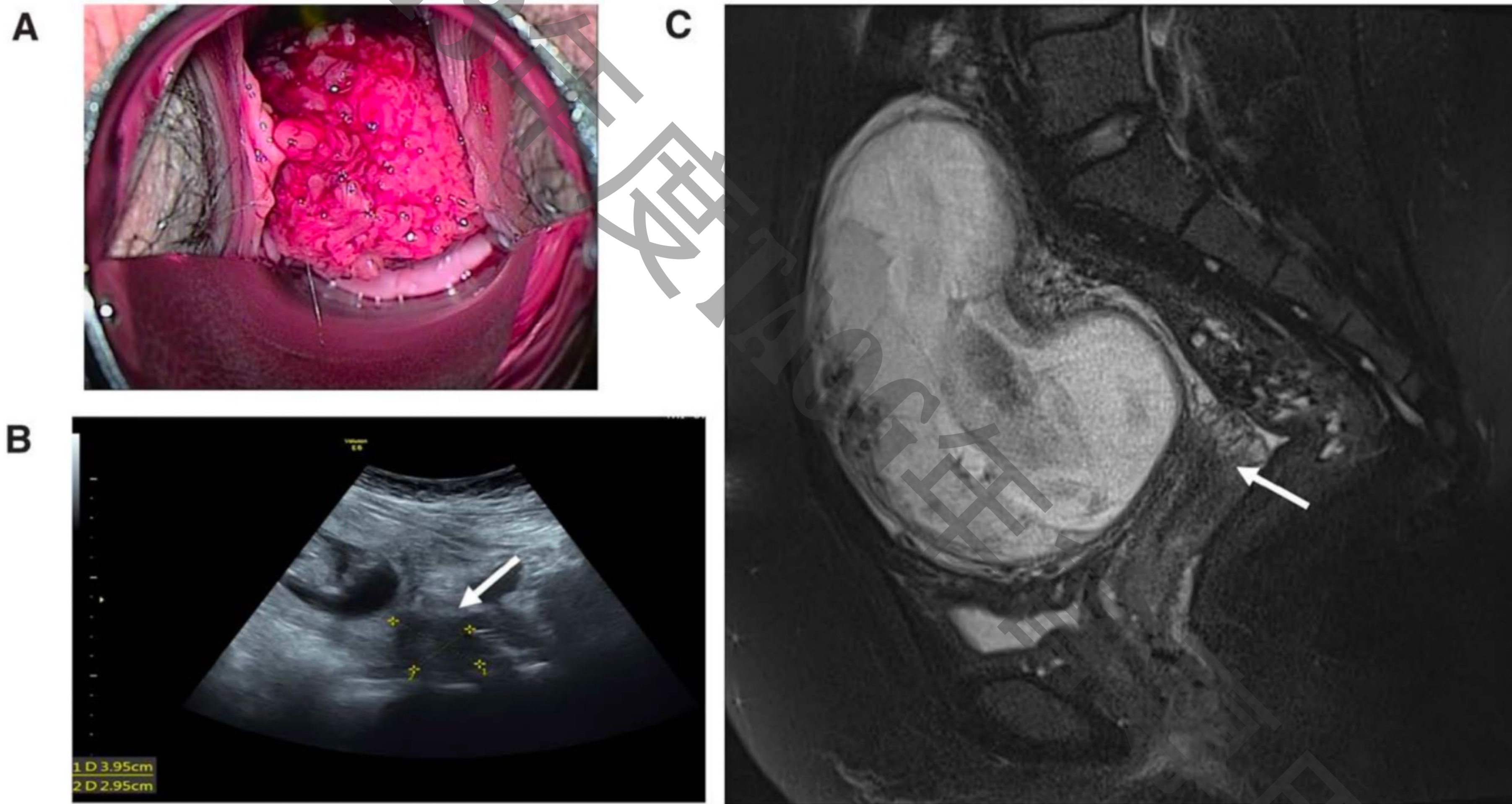


Figure 1. Gross image, ultrasound, and magnetic resonance image (MRI) of the condyloma acuminata. (A) Gross image of the condyloma acuminata. The tumor was 3.5 cm in diameter at the cervical region. (B) Ultrasound of the cervical condyloma acuminata (hypoechoic lesion, arrow). (C) T2 MRI of the cervical condyloma acuminata (arrow). MRI = magnetic resonance image.

Syphilis

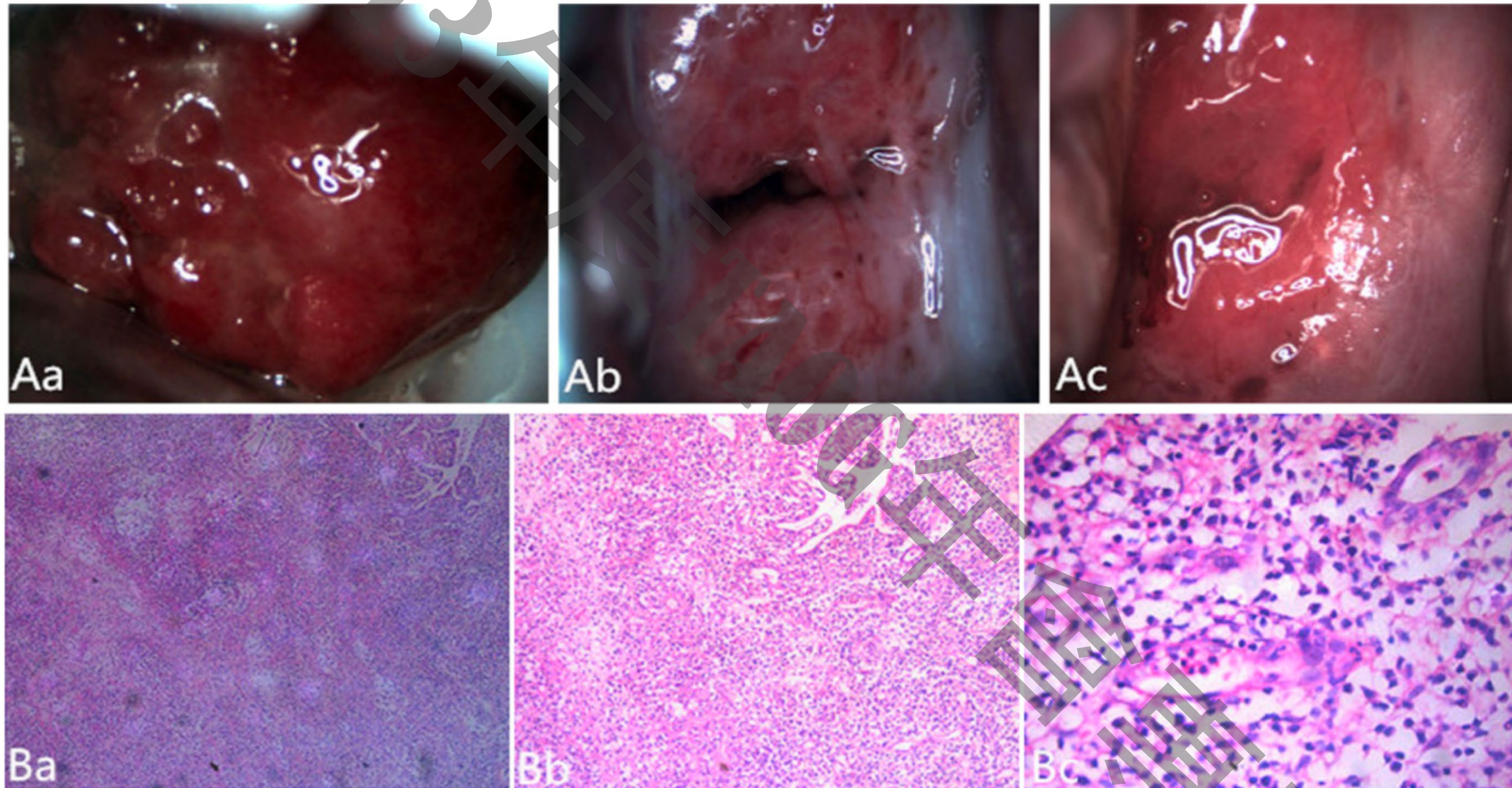


Figure 1. Colposcopy and pathology findings of the cervical lesions. (Aa) Before treatment: the uterine cervix is covered with irregular bulges. (Ab) After 2 weeks of treatment: the cervix is relatively smooth compared to pretreatment. (Ac) After 4 weeks of treatment: the cervix is nearly normal. (Ba)–(Bc) Stroma heavily infiltrated by lymphocytes, plasma cells, histiocytes, and debris (hematoxylin and eosin stain; Ba $\times 50$, Bb $\times 100$, Bc $\times 400$).

Actinomyces

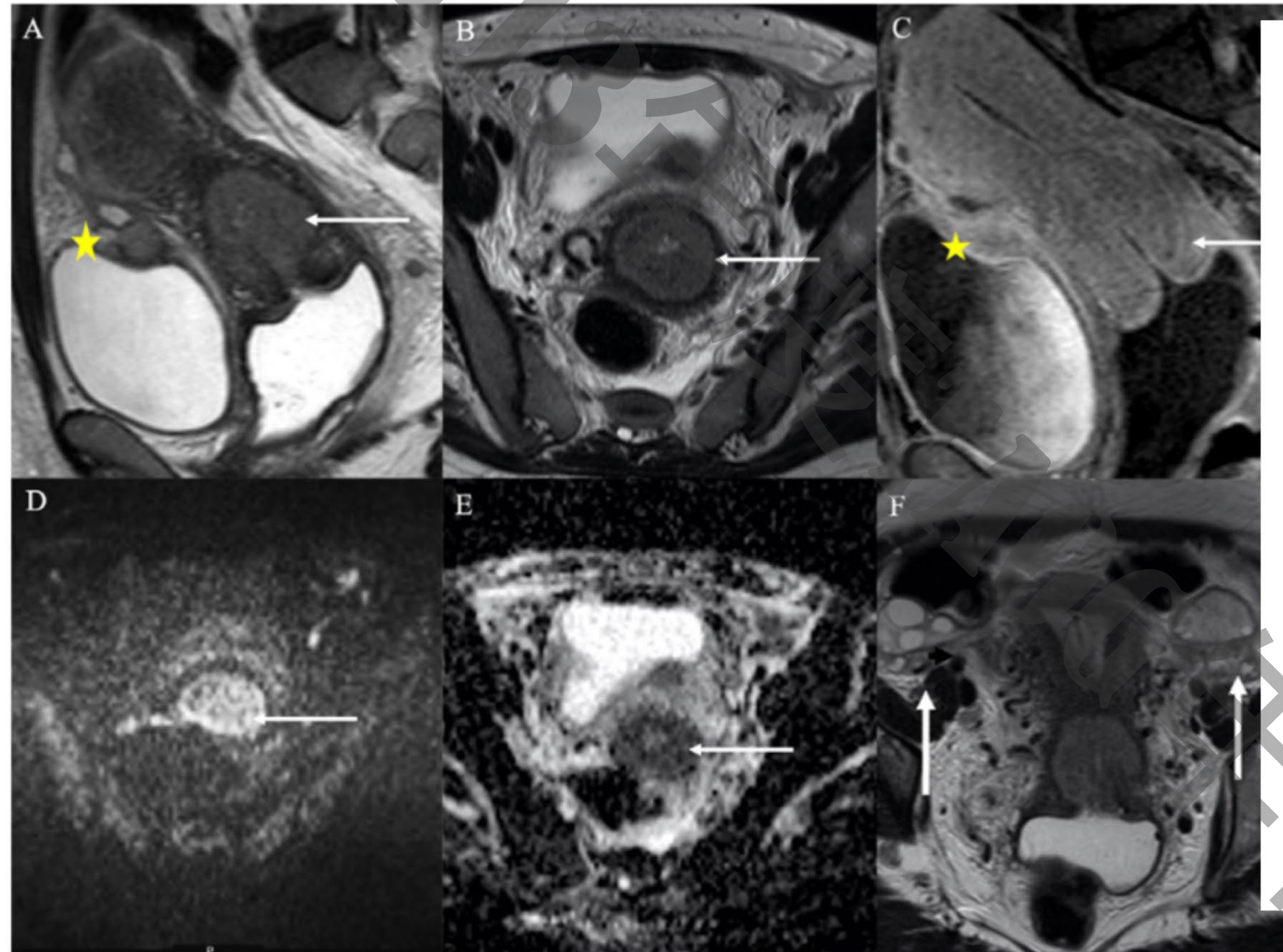


Figure 3 Pelvic magnetic resonance imaging (MRI) with and without gadolinium at diagnosis for initial characterization and staging of the cervical mass. (A) Sagittal T2-weighted. (B) Axial T2-weighted. (C) Axial T1-gadolinium. (D) Diffusion-weighted images (DWI) B value 1000 mm³/s. (E) Attenuation diffusion coefficient (ADC). (F) Axial T2-weighted.

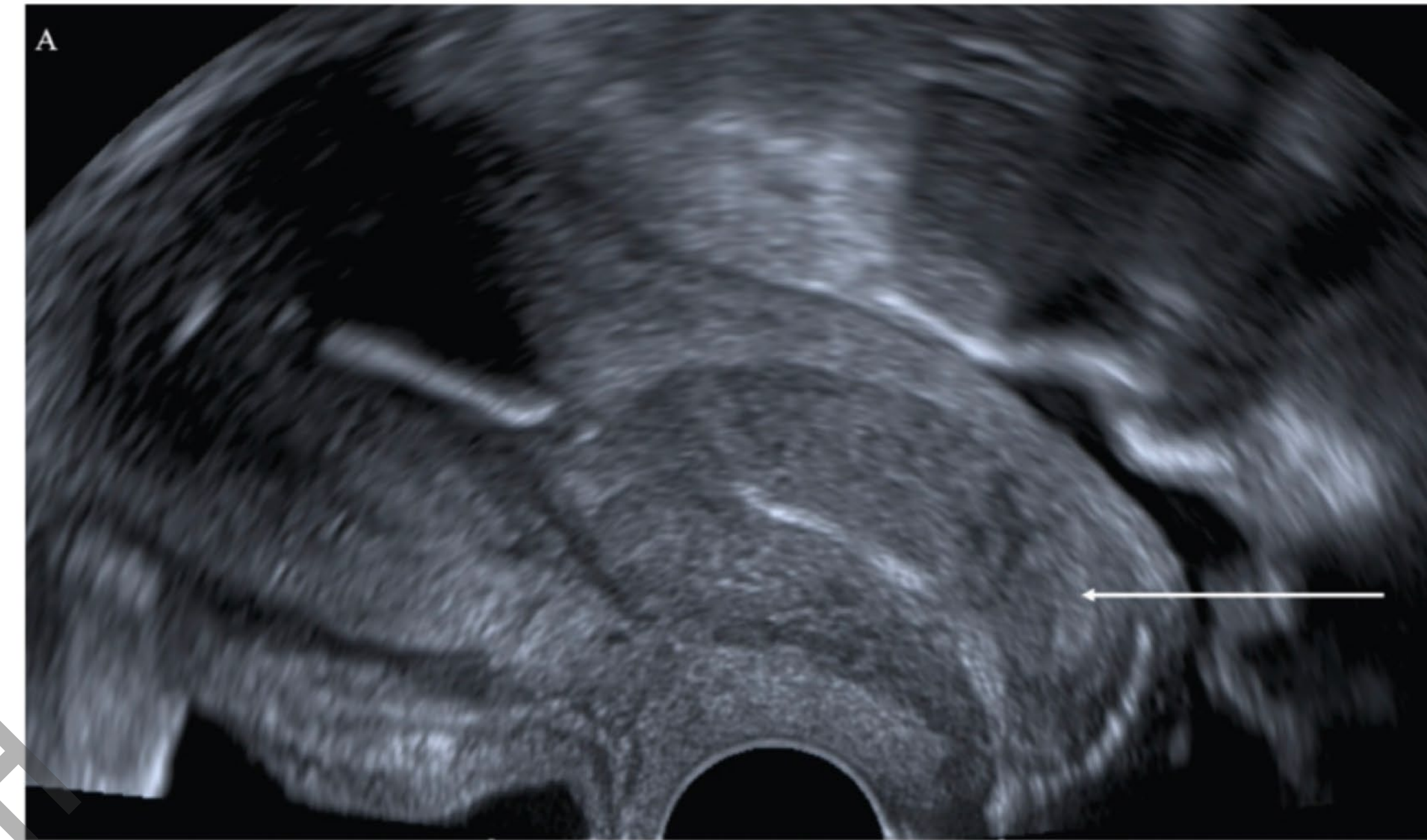


Figure 2 Transvaginal ultrasound showing the cervical mass.

Foreign body



Fig. 1. Rich vascularization of the lesion visualized by power Doppler

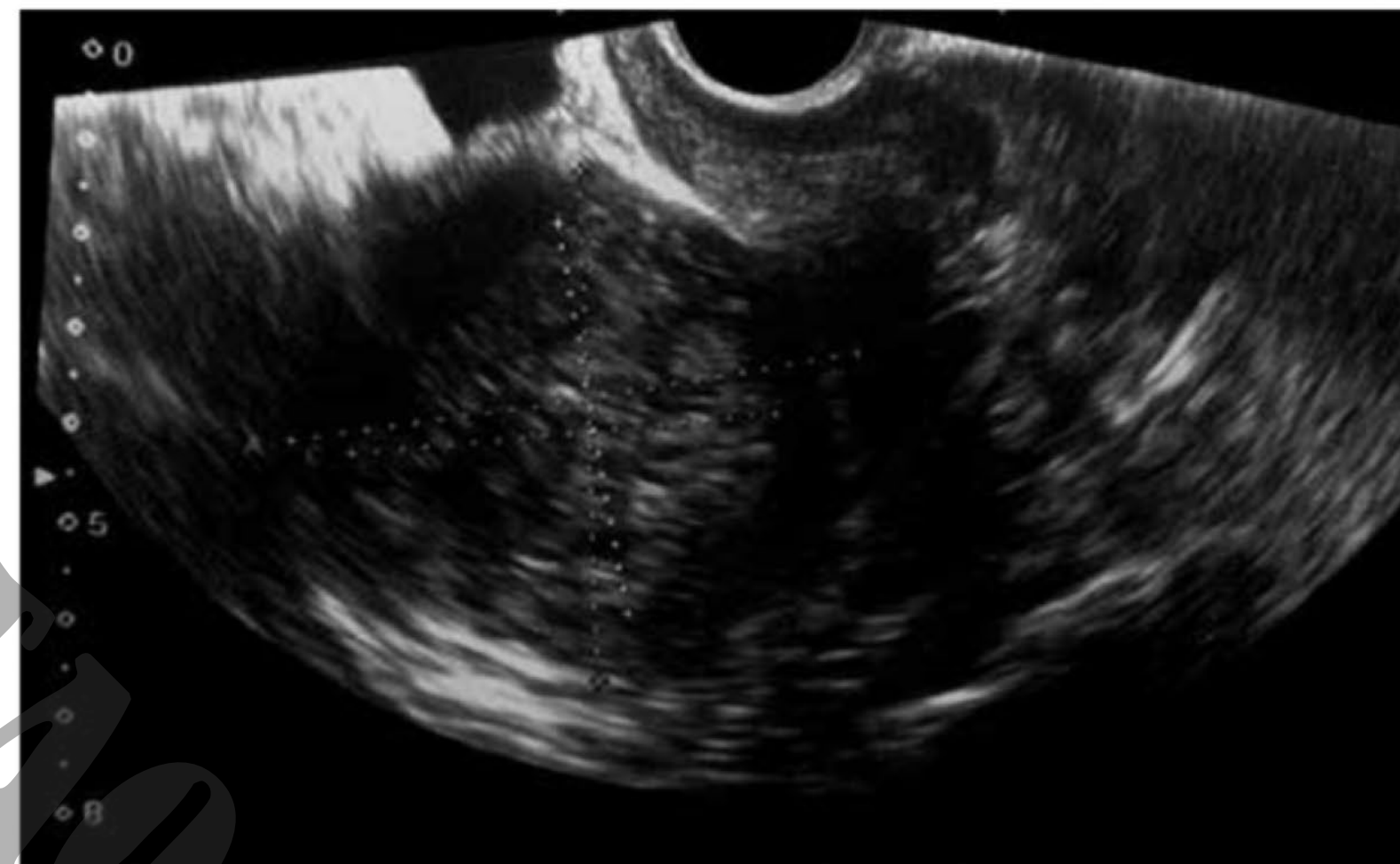


Fig. 2. Heterogeneous mass in the cervical area

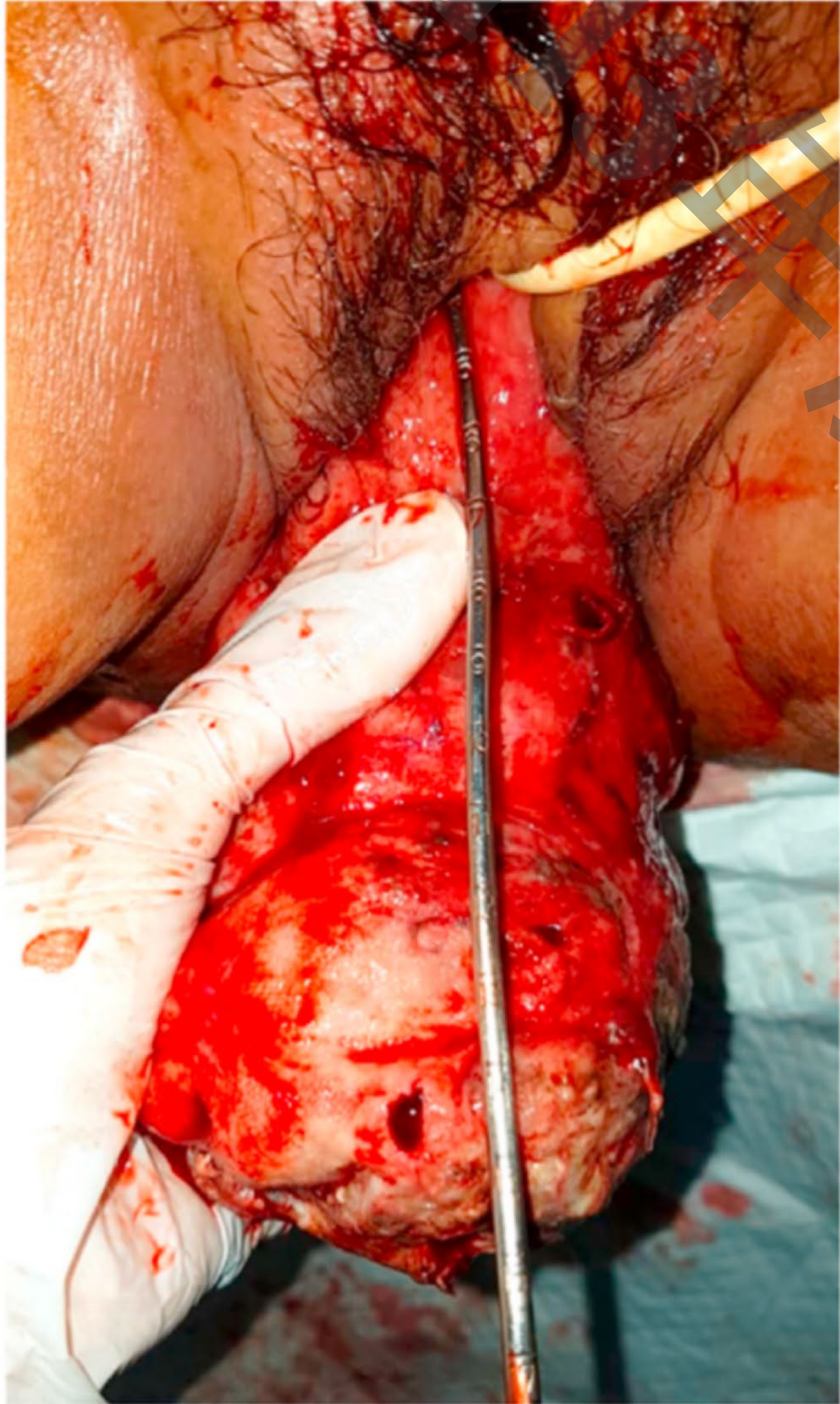


Fig. 3. Foreign body – shampoo bottle cap



Fig. 4. Foreign body – shampoo bottle cap, different angle

Cervical Fibroid



a.



b.

Actinomyces

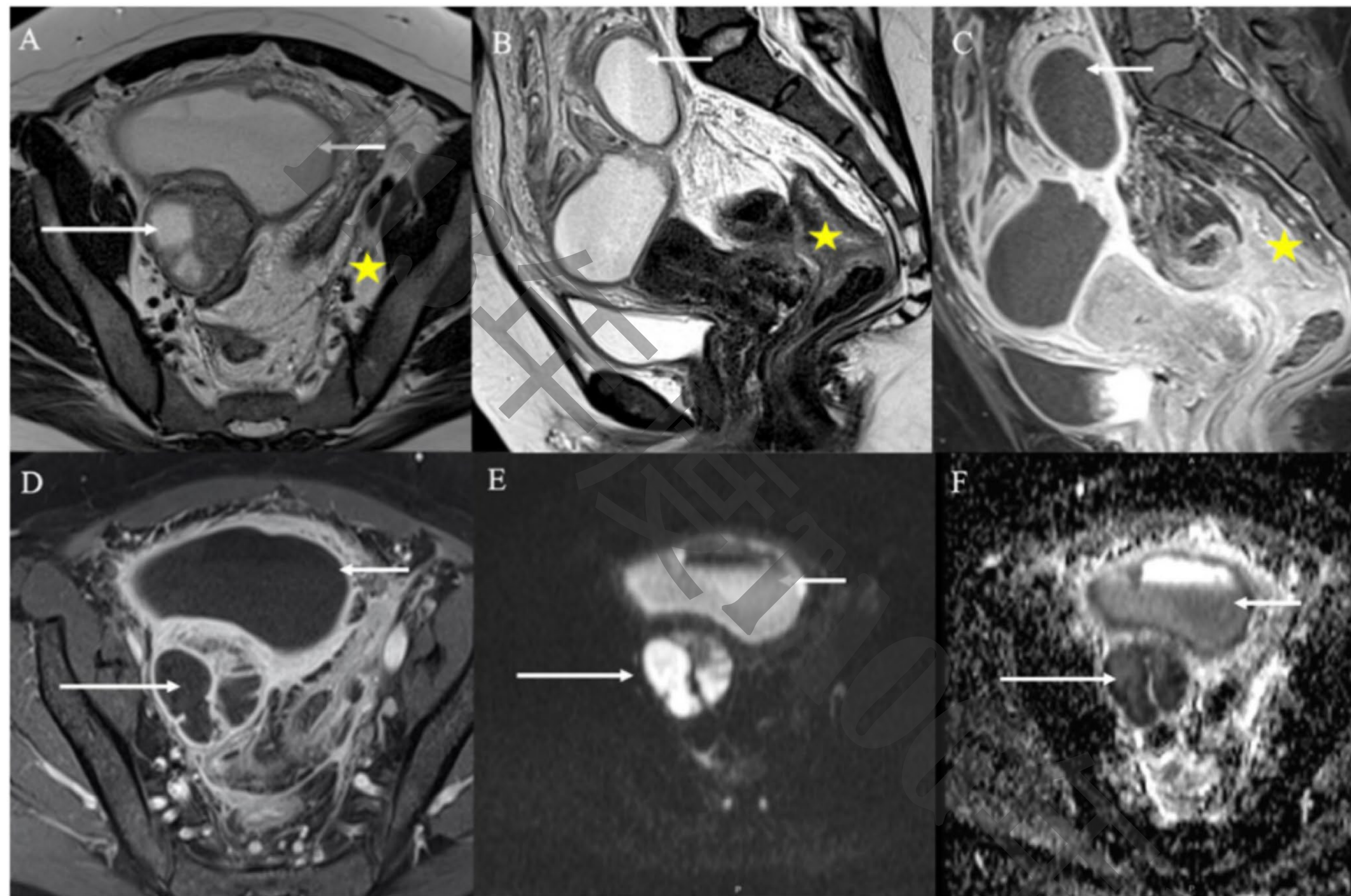


Figure 8 Pelvic magnetic resonance imaging (MRI) for further characterization, which shows a probably abdominopelvic abscess (short arrow) and a right tubo-ovarian abscess (long arrow). The surrounding inflammatory changes are indicated with stars. (A) Axial T2-weighted. (B) Sagittal T2-weighted. (C) Sagittal T1-gadolinium. (D) Axial T1-gadolinium. (E) Diffusion-weighted images (DWI) B value 1000 mm³/s. (F) Attenuation diffusion coefficient (ADC)

Polypoid endometriosis – A rare entity of endometriosis mimicking ovarian cancer

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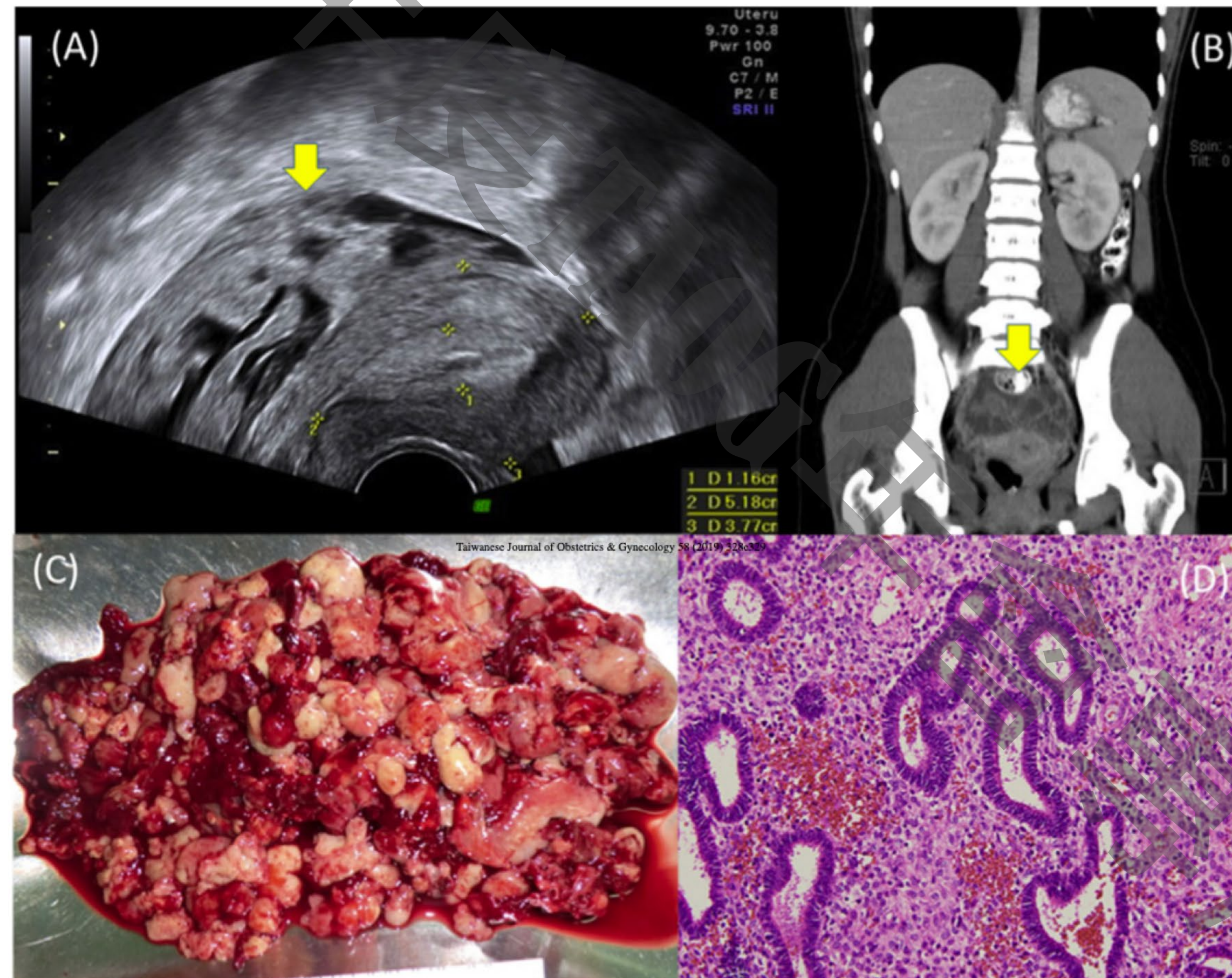


Fig. 1. **A:** The vaginal ultrasound demonstrated an irregular shaped, heterogeneous, 10 cm mass posterior to the uterus (arrow). **B:** Computed tomography (CT) imaging of the abdomen and pelvis showed an amorphous, irregular shaped mass in pelvis (arrow). **C:** Gross finding of polypoid endometriosis. Multiple fragile polypoid nodules were found in pelvic cavity. **D:** Microscopic finding showed typical endometrial glands and stroma with focal hemorrhage (H&E, $\times 200$).

Bilateral ovarian thecomas with sclerosing peritonitis mimicking advanced ovarian cancer

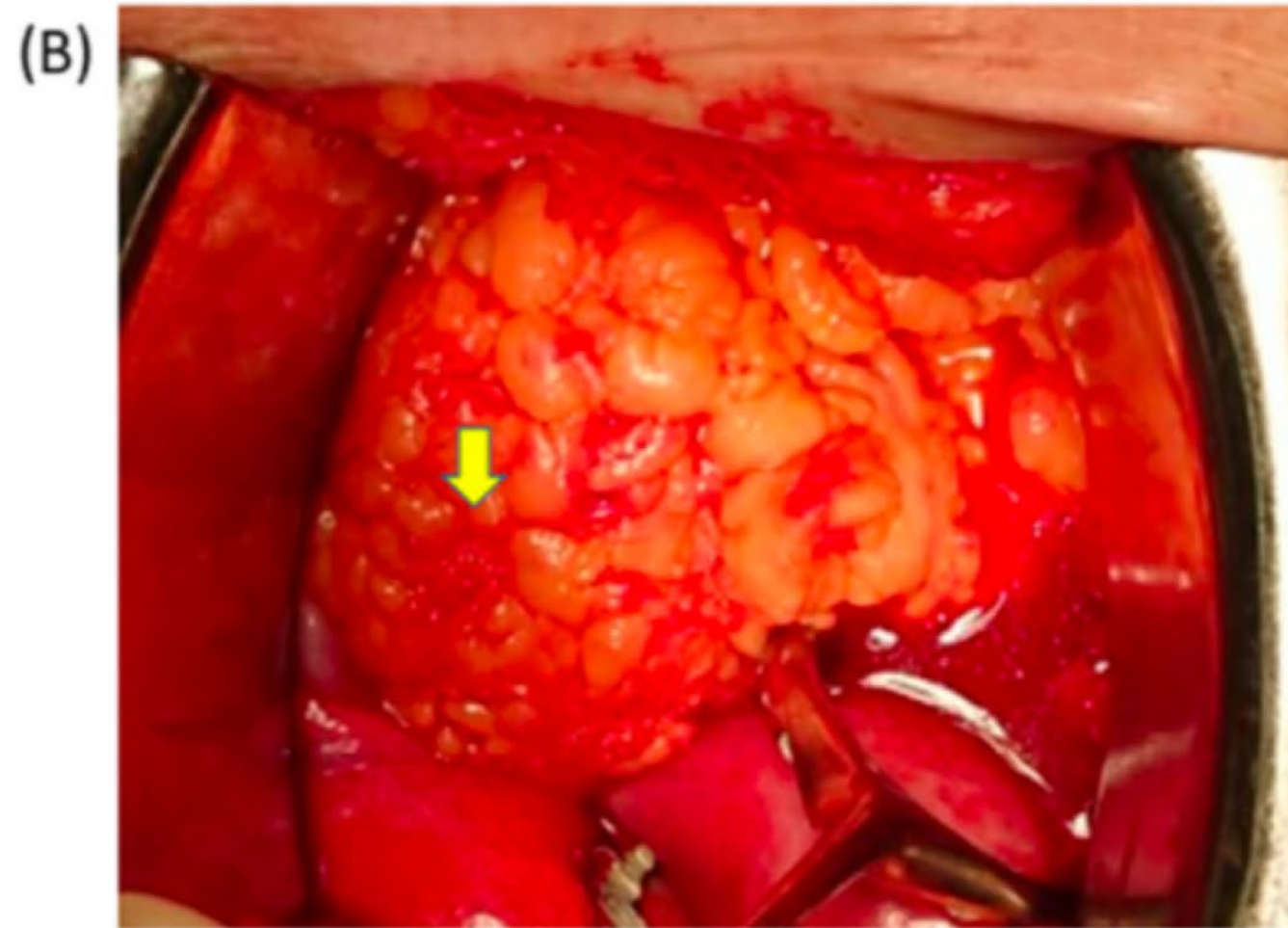
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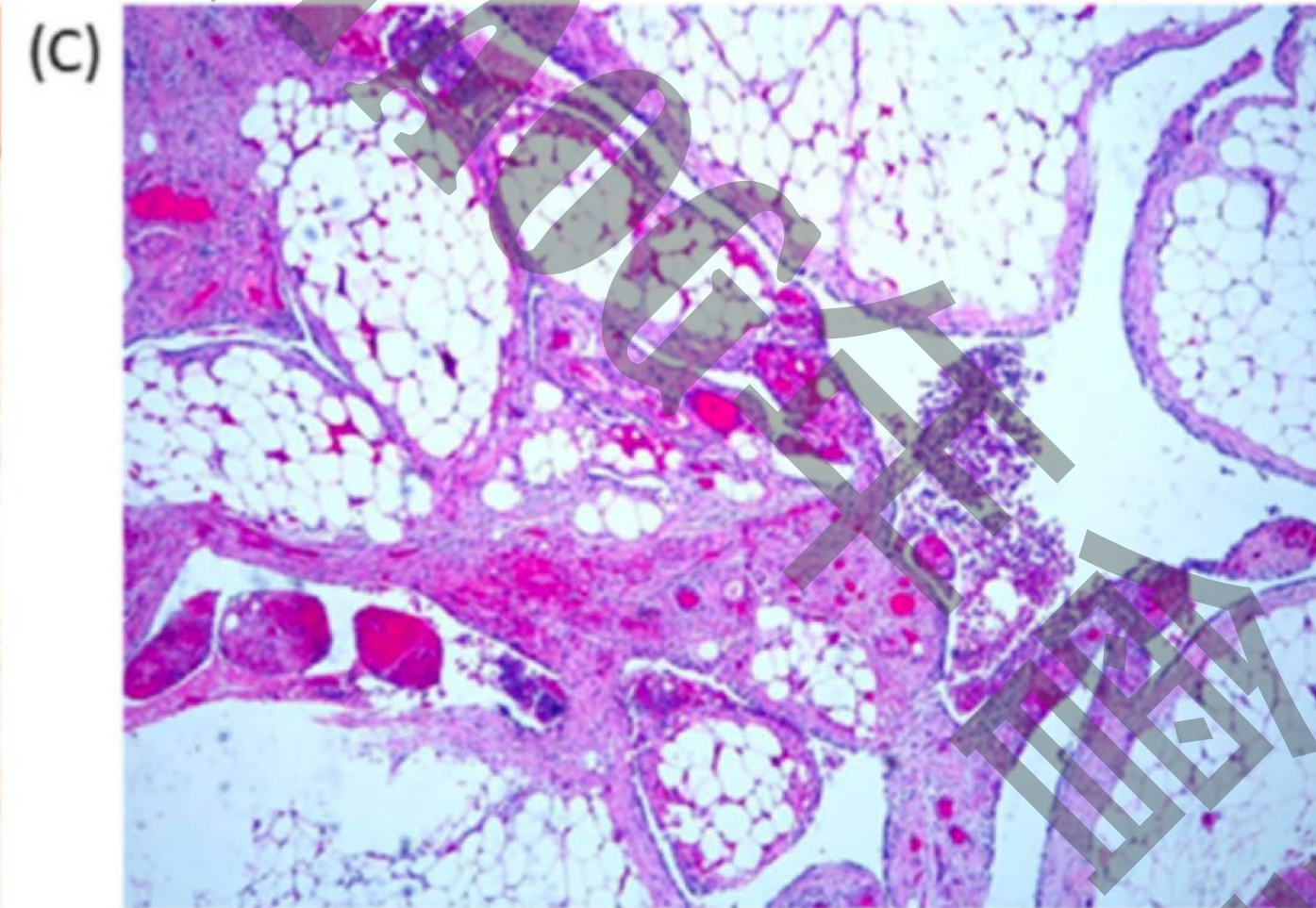
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Indurated omentum



Decidualized endometrioma (1)

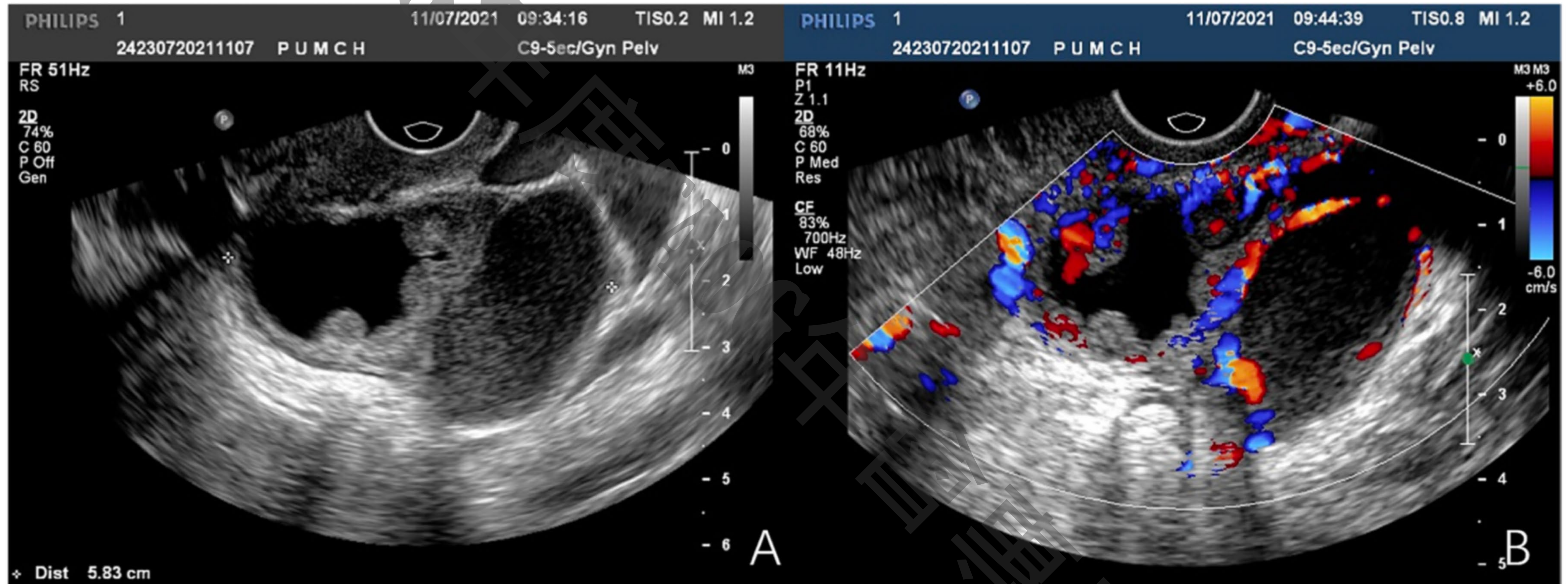


Fig. 1 Transvaginal ultrasound imaging of the left adnexal mass. **A** Transvaginal ultrasound depicting multilocular cyst with thick internal walls and papillary projection protruding into the cavity. **B** Doppler ultrasound depicting vascularity within capsule wall and papillary projections.

Decidualized endometrioma (2)

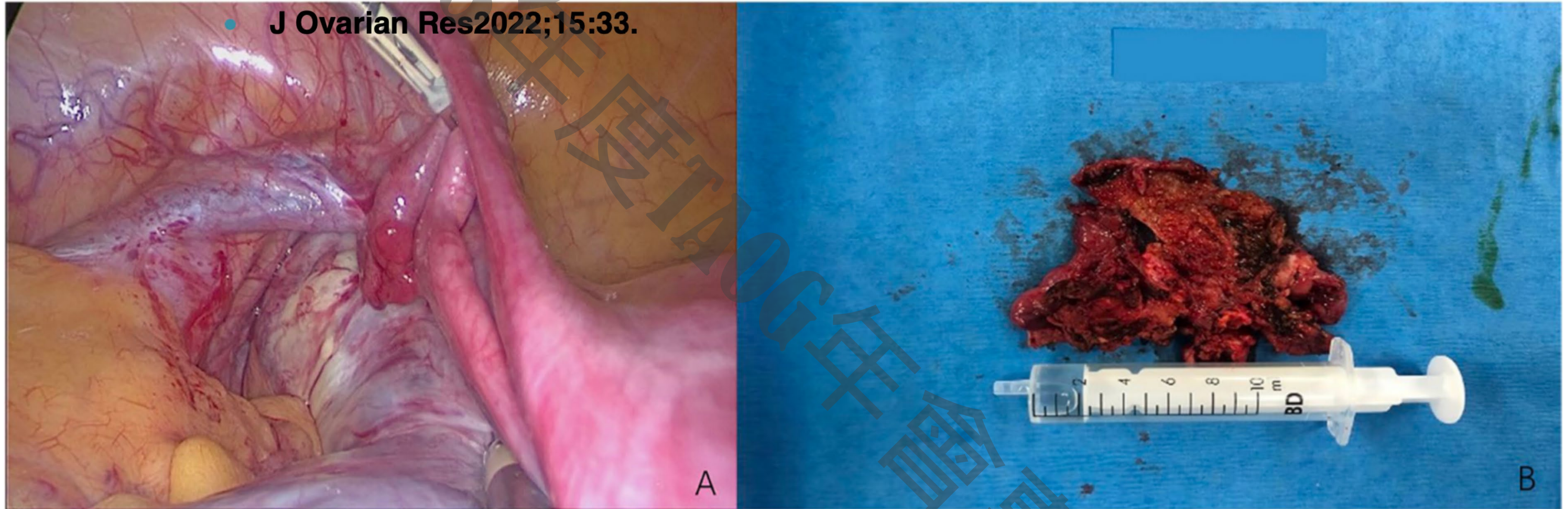
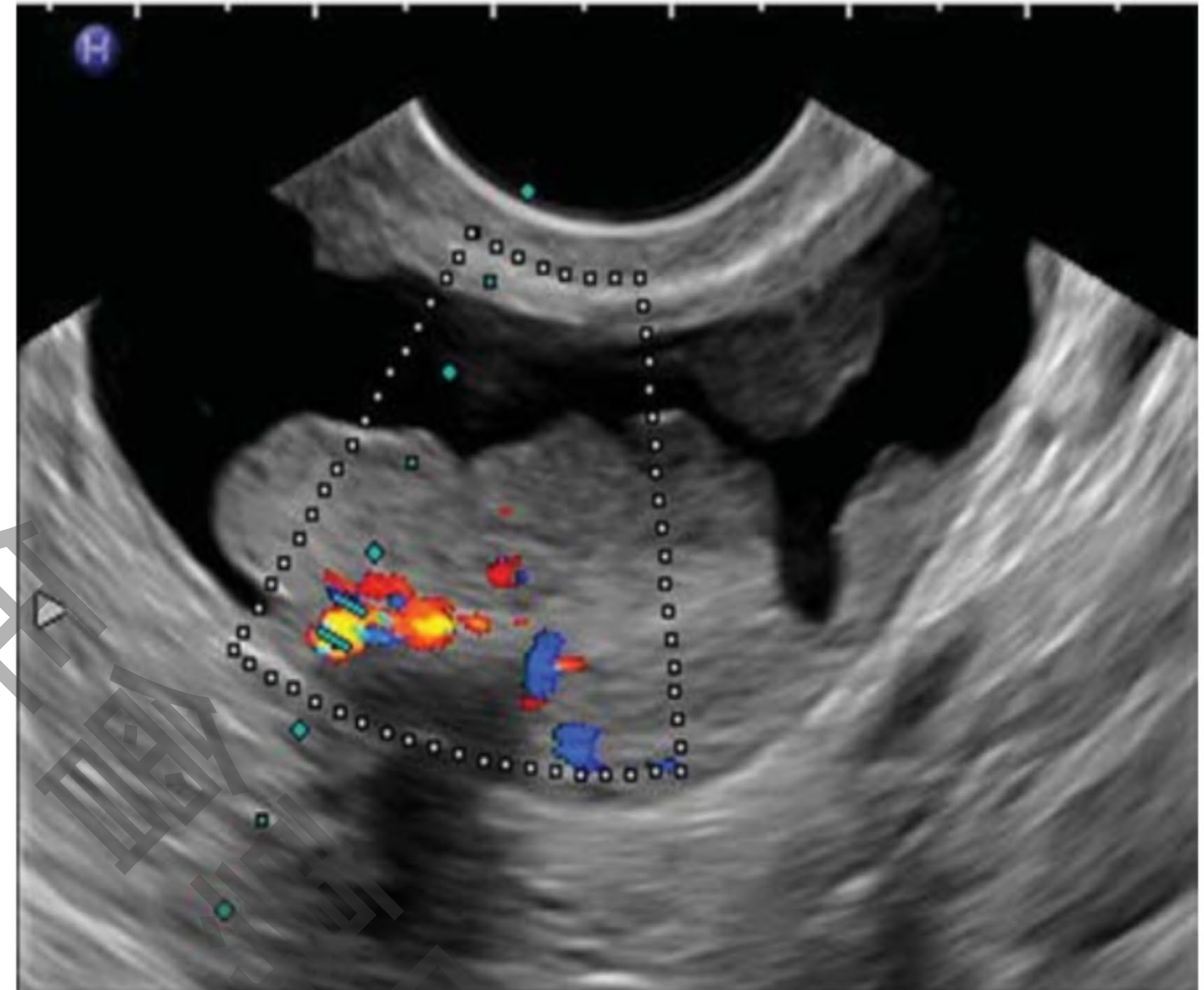


Fig. 2 Surgical depiction of the left adnexal mass. **A** Laparoscopy showed an 8 cm left ovarian multilocular cyst adhering to the left pelvic wall and mesorectum. **B** Surgical specimen with brown cystic content and irregular and rounded internal cyst wall

Decidualized endometrioma (3)



Luteoma of pregnancy

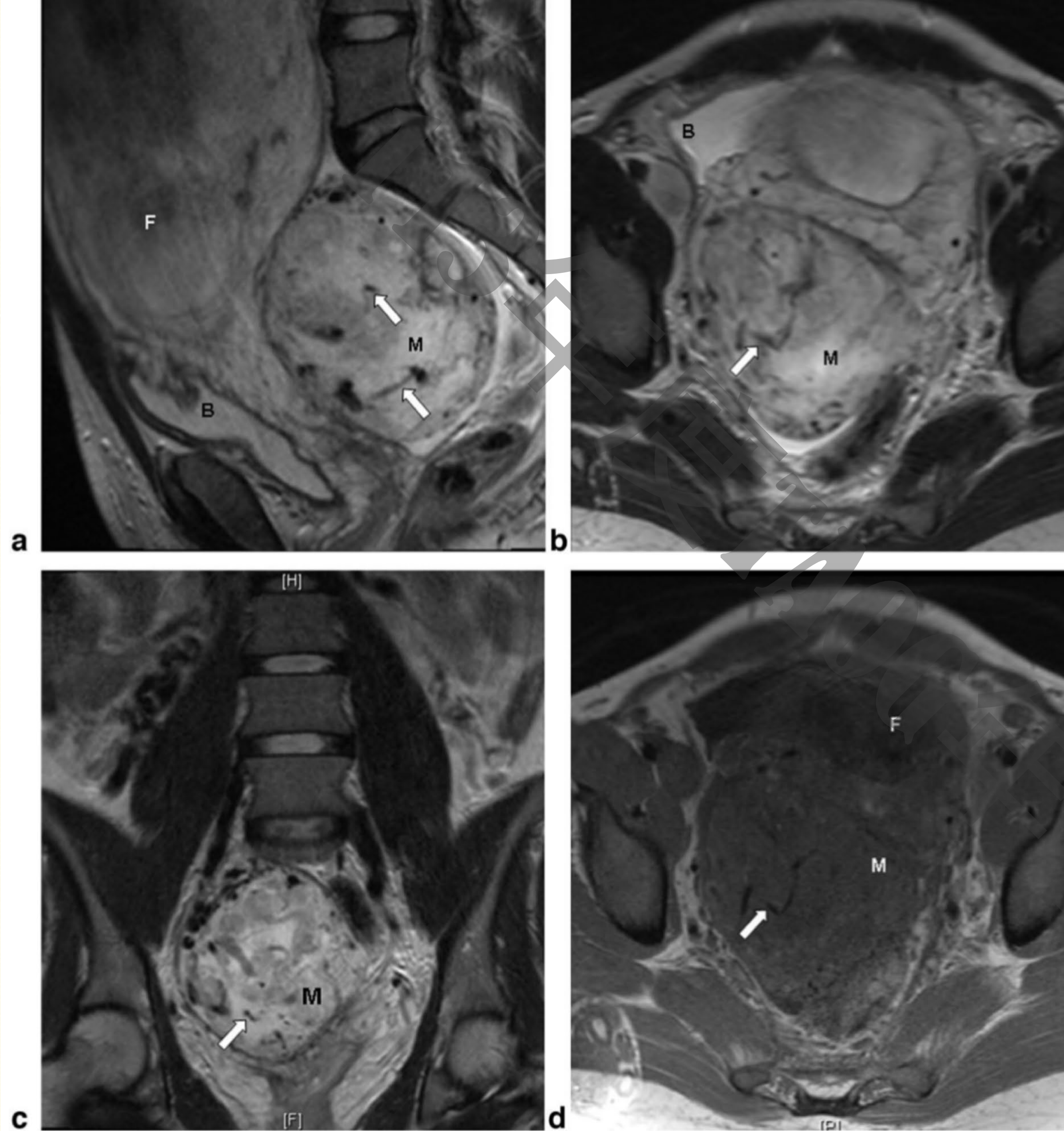


Figure 2. Luteoma of pregnancy at 22-week gestation in a 23-year-old woman. **(a)** Sagittal T2-weighted image, **(b)** axial T2-weighted image, **(c)** coronal T2-weighted image, and **(d)** axial T1-weighted image. The MR images show a mass (M) midline to the right, inferior to the uterus. The mass has predominantly high signal intensity on the T2-weighted images (**a-c**) and heterogeneous low signal intensity on the T1-weighted images (**d**). Scattered throughout the mass are structures with flow-void artifact (arrows), suggestive of vasculature (**a-d**) (M, mass; B, bladder; F, fetus).

OHSS

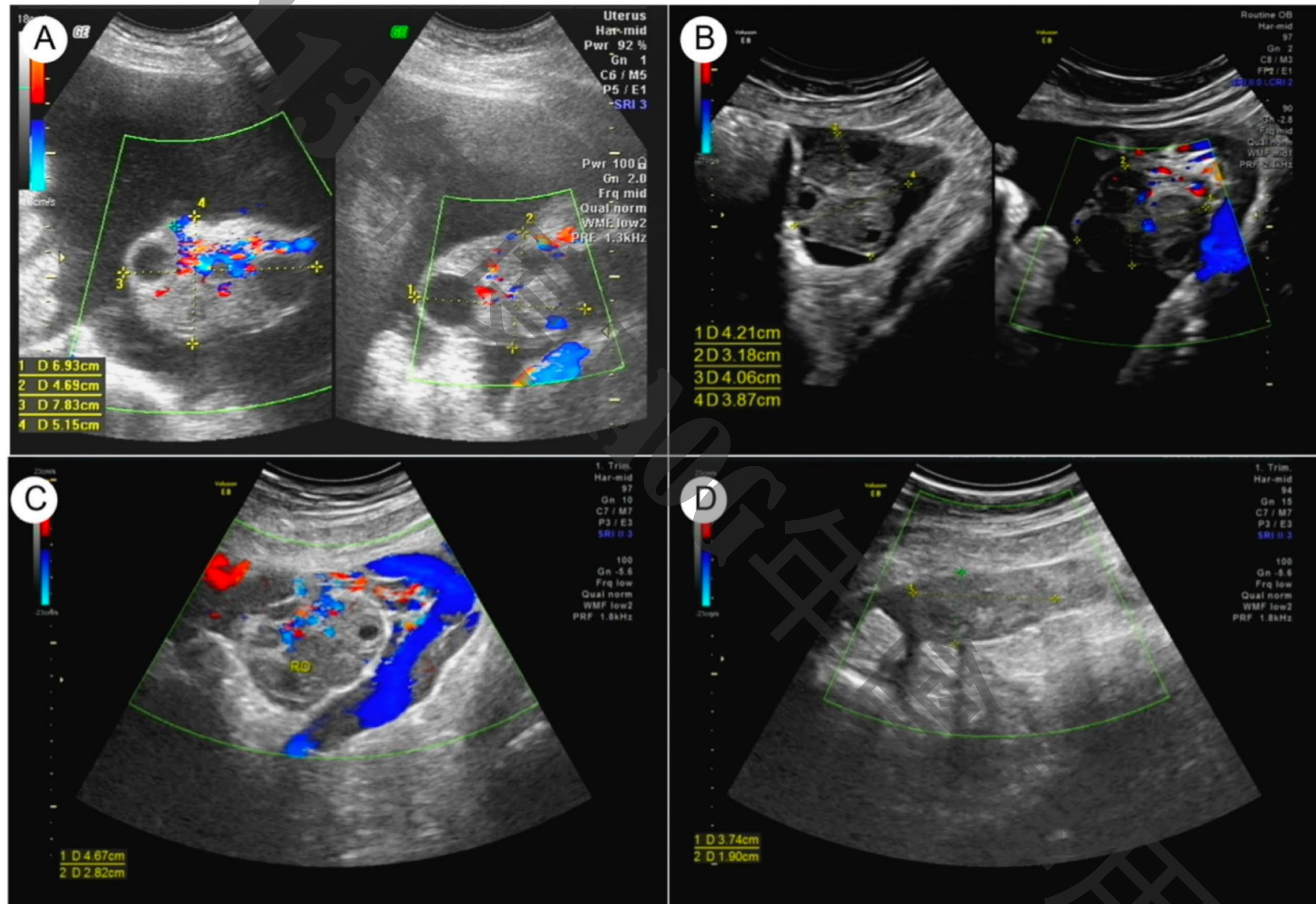
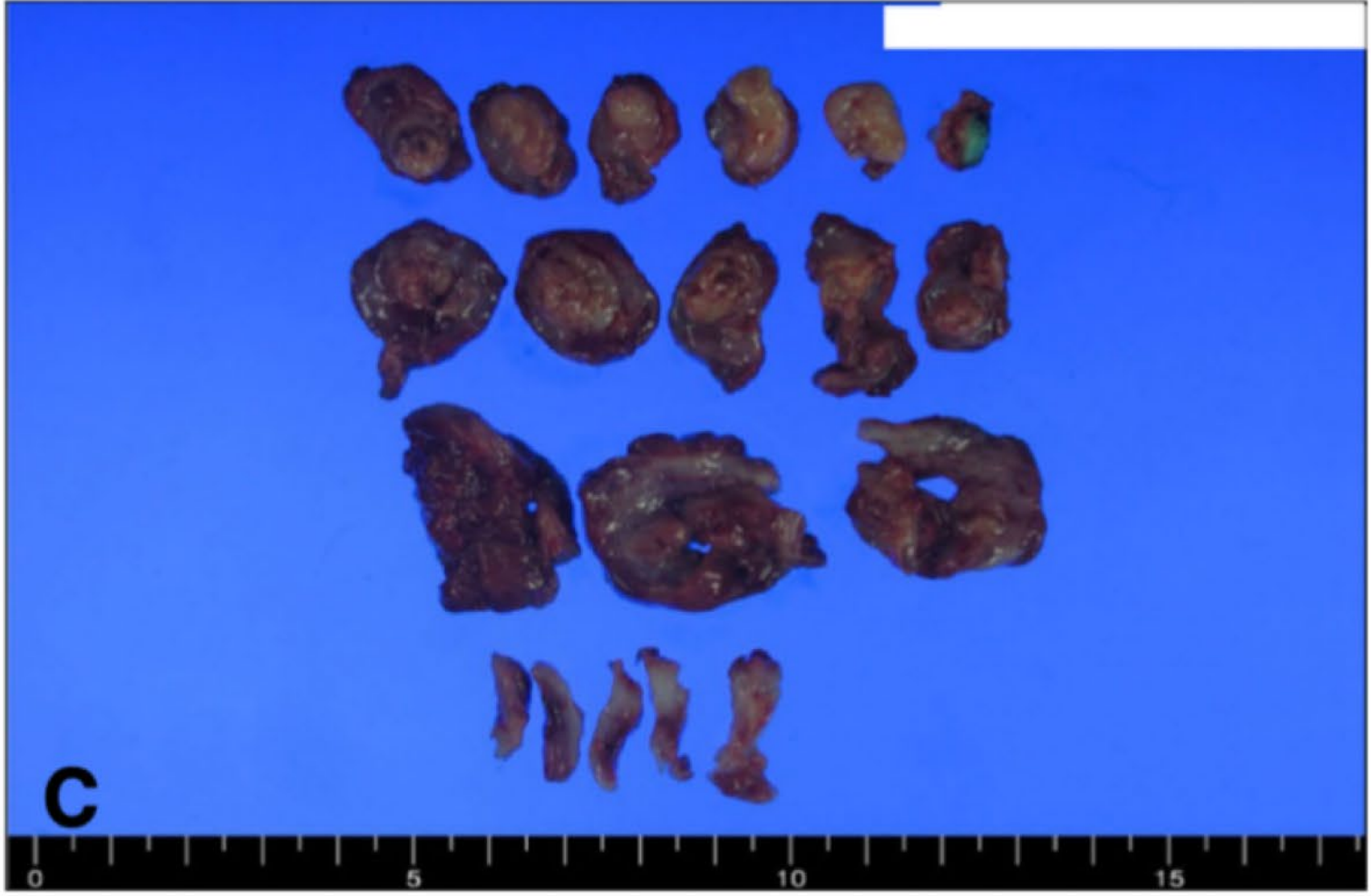
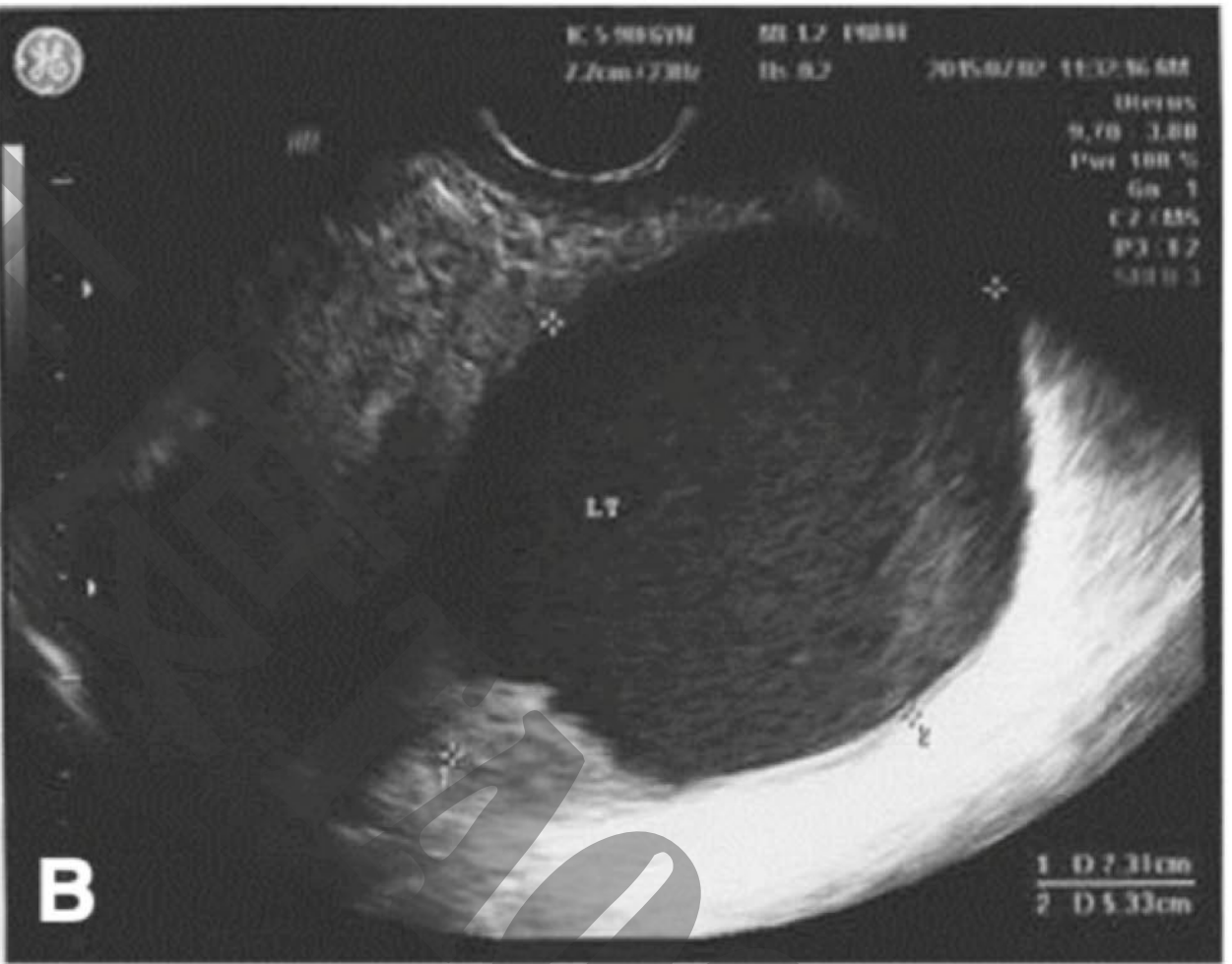
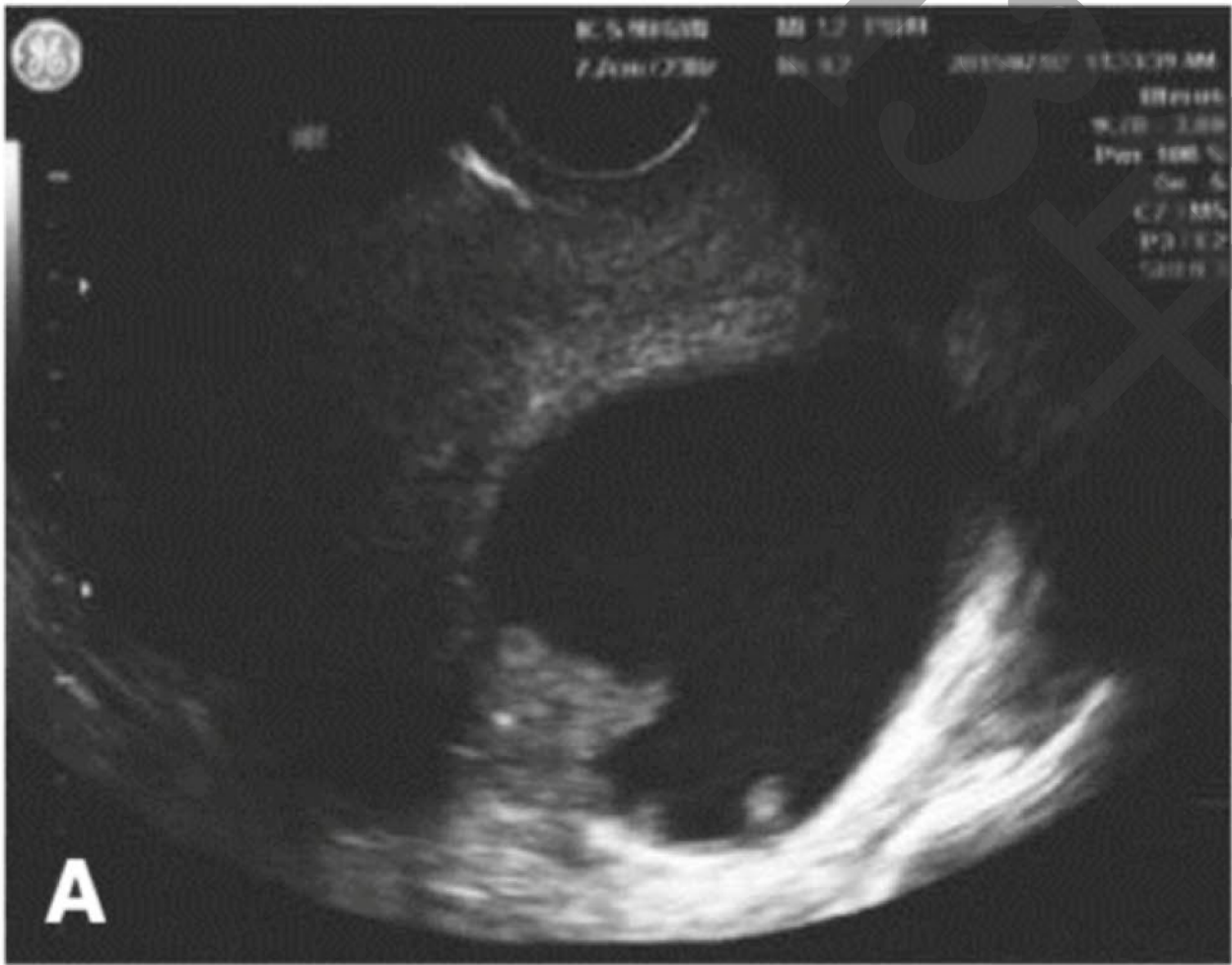


Fig. 1 Ultrasound images of the ovaries. **A** Enlarged bilateral ovaries (left, 6.9×4.7 cm; right, 7.8×5.2 cm) with multiple anechoic areas were detected at five weeks of gestation. **B** At the 15 weeks of gestational age, the right ovary became solid, and multiple cysts involved the left ovary. At 24 weeks of gestational age, there was right (**C**) and left (**D**) ovarian enlargement, with hypoechoic area in the parenchyma and visible rich blood flow signals in the right ovary

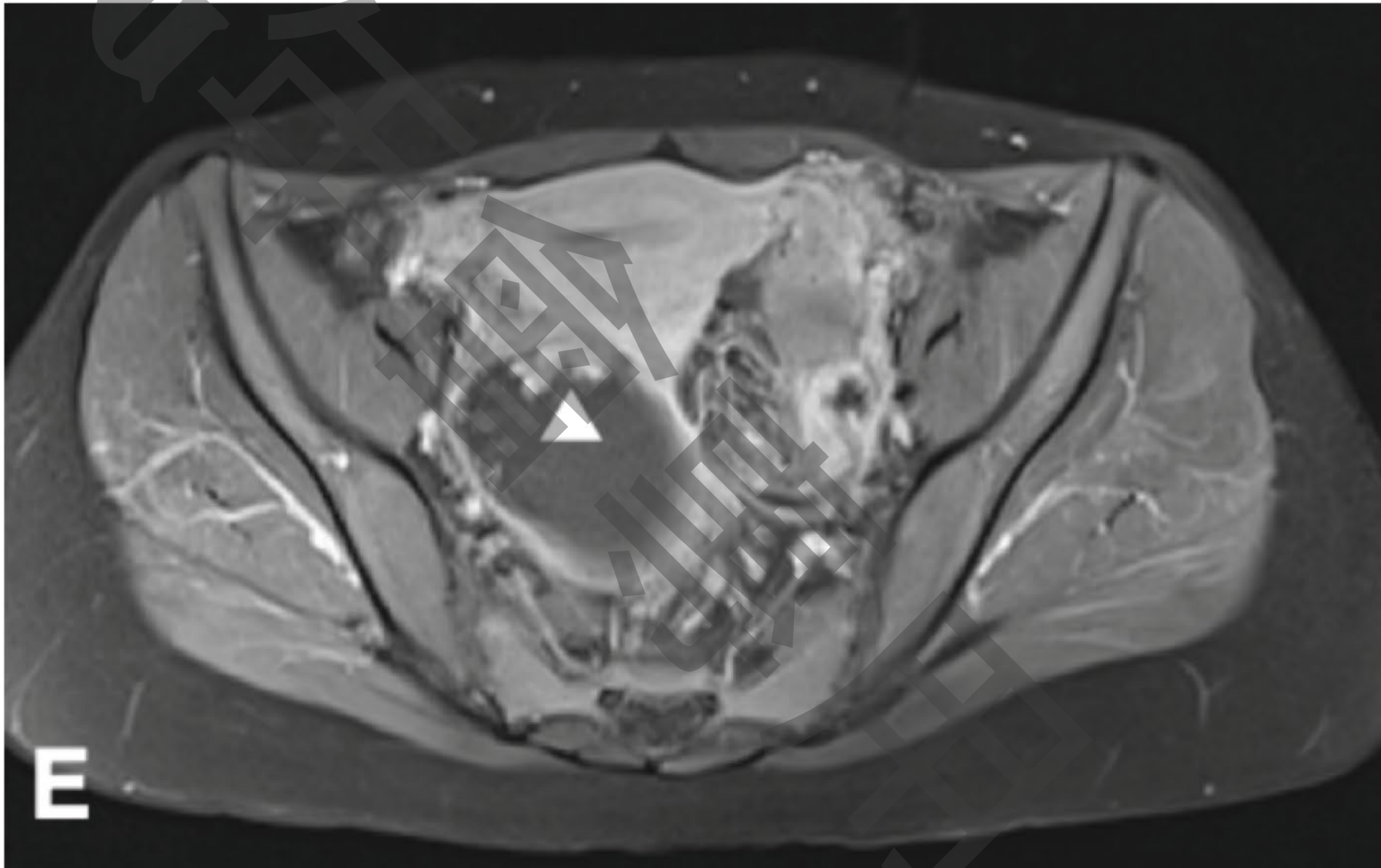
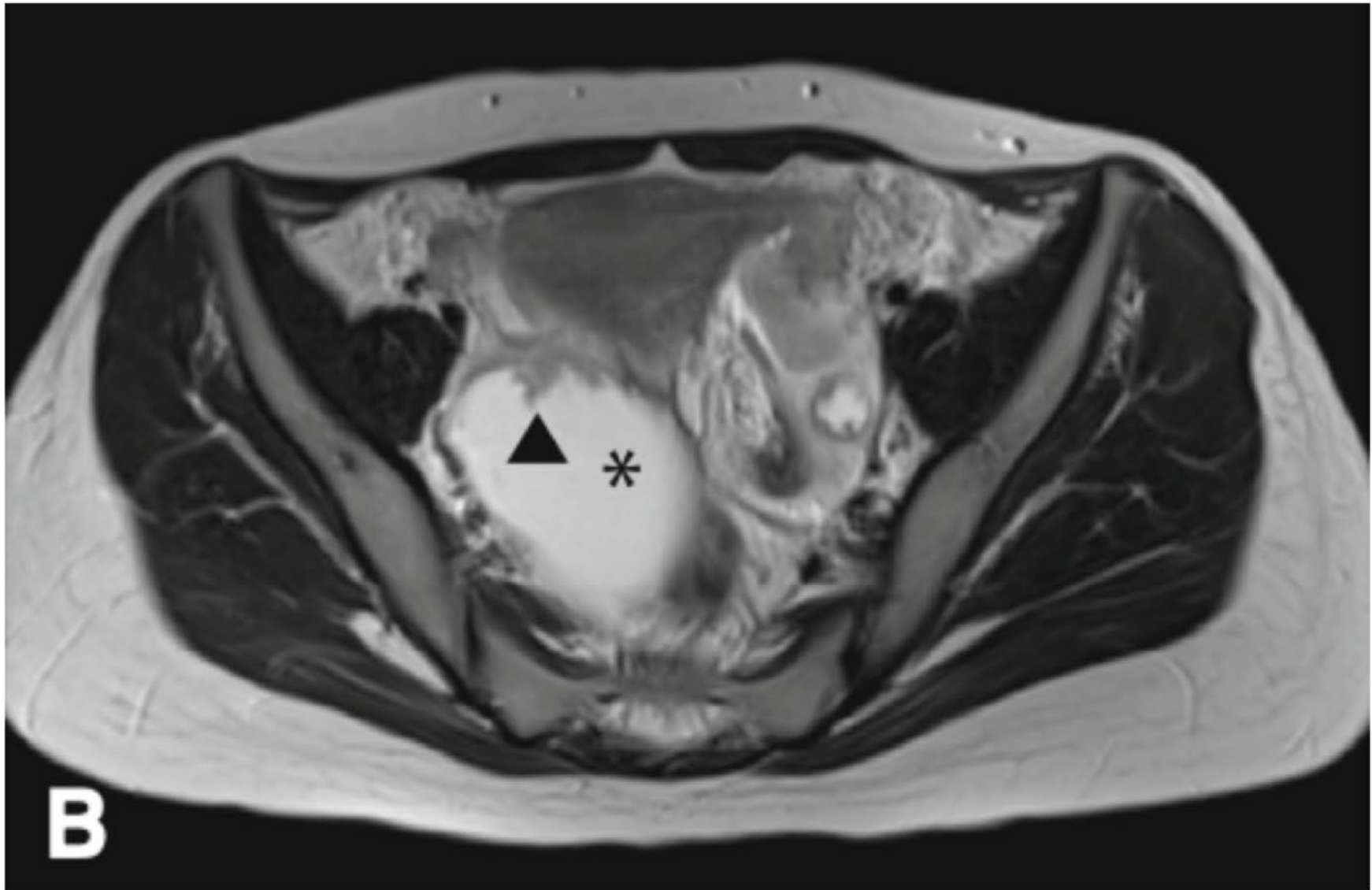
Hydropic leiomyoma



Tubal Pseudo-Carcinomatous Hyperplasia



(No gross tumor)



Tubal Tuberculosis



[Table/Fig-1]: Panhysterectomy specimen showing grossly dilated and enlarged fallopian tubes. Inset showing mucosal tufting and focal areas of caseation.

Tubal Pregnancy

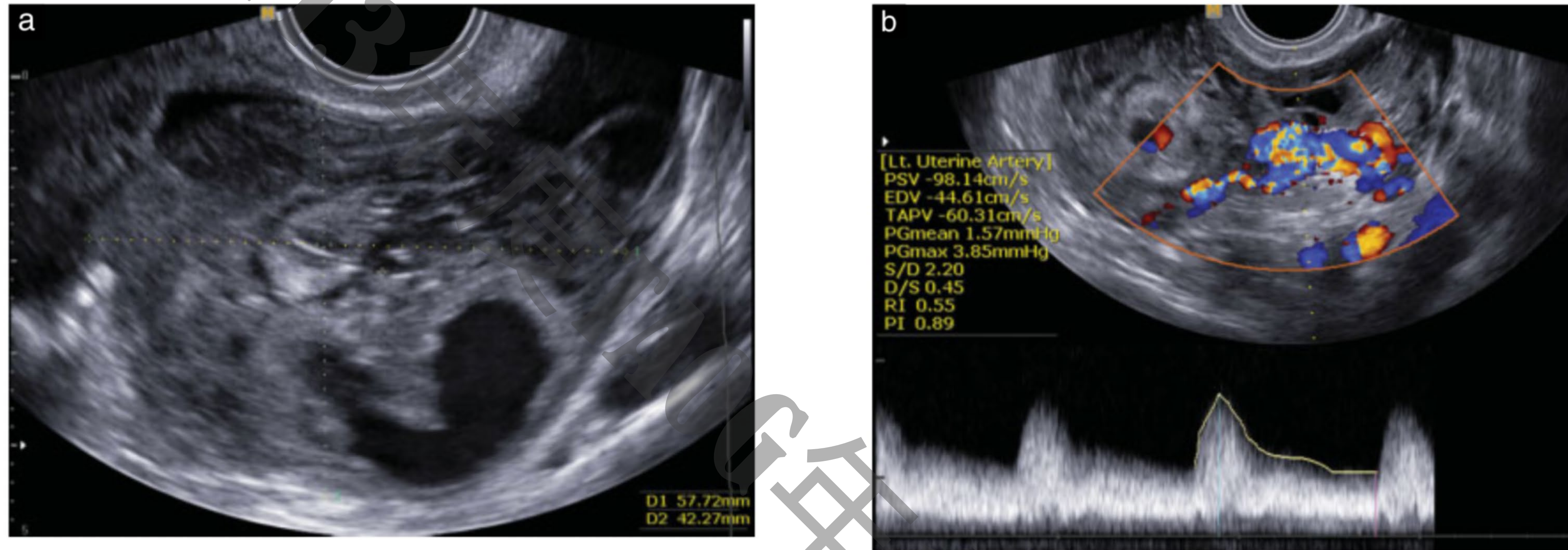


Figure 1 (a) Transvaginal sonographic image in transverse section of the left adnexal site in a 32-year-old woman, showing the presence of an inhomogeneous multilocular solid mass close to the ovary. Note the poorly defined outer borders of the mass and the mixture of anechoic and hyperechoic areas. (b) Transvaginal power Doppler image, showing the presence of a 'nest' of tortuous blood vessels around the mass; on pulsed-wave Doppler, the flow had a high peak systolic velocity and a low resistance index, suggestive of vascular malformation.

Xanthogranulomatous inflammation caused by *K. pneumoniae* and nocardiosis mimicking a uterine tumor and invading the ureter and colon: A case report and review of the literature

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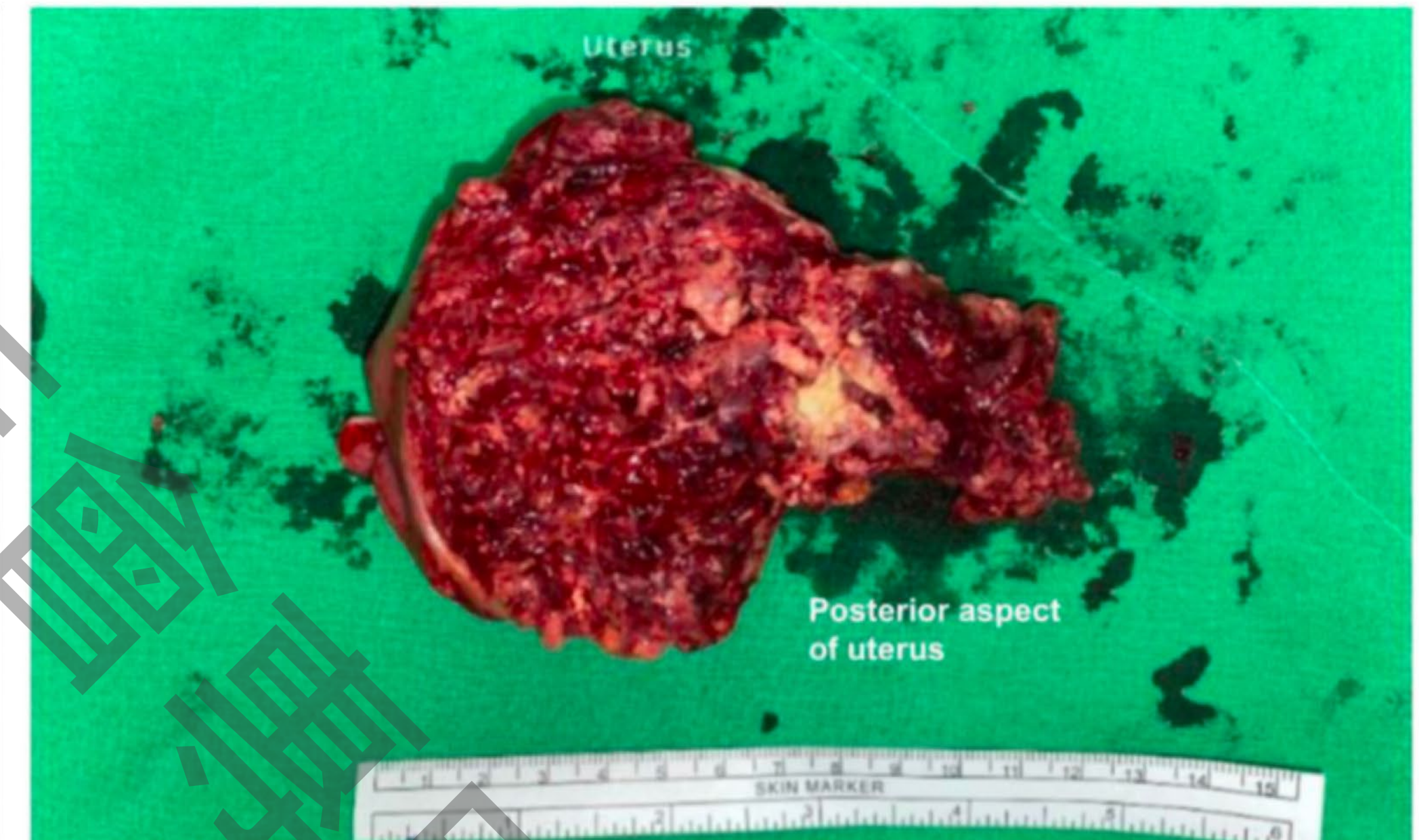
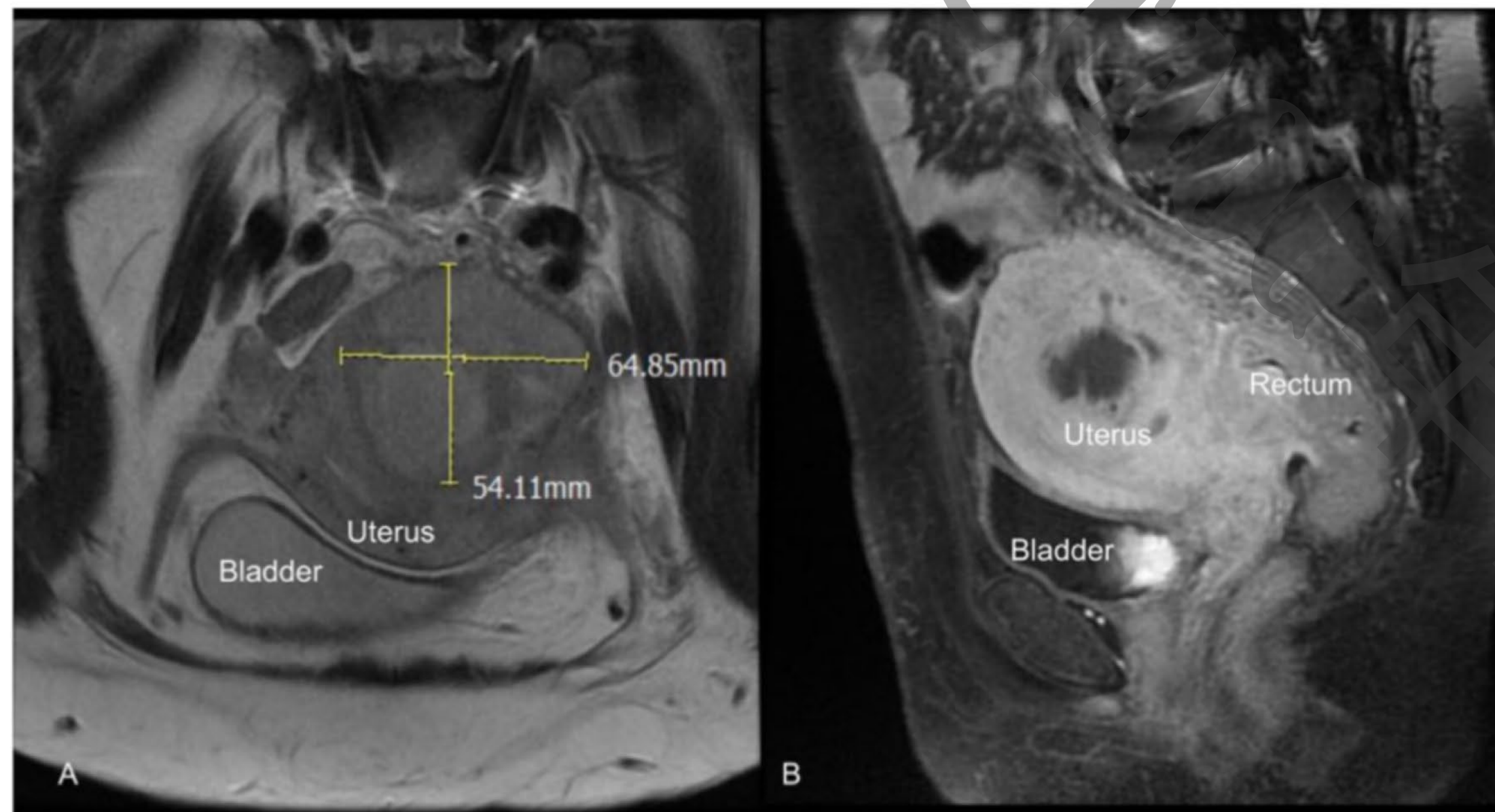
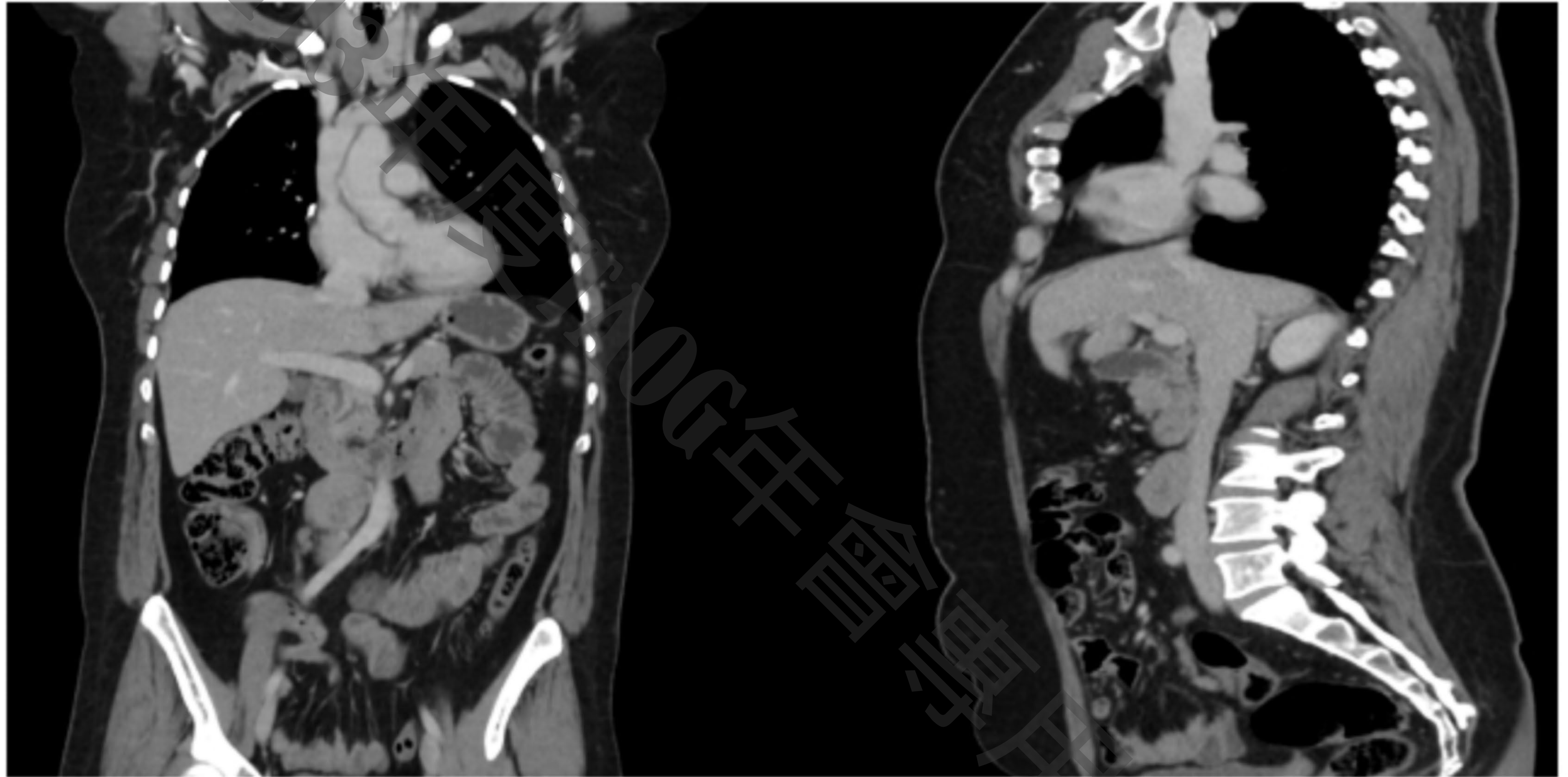


Fig. 3. Gross picture of uterus. Necrosis was noted at the posterior uterine wall.

Leiomyomatosis peritonealis disseminata (1)



Leiomyomatosis peritonealis disseminata (2)

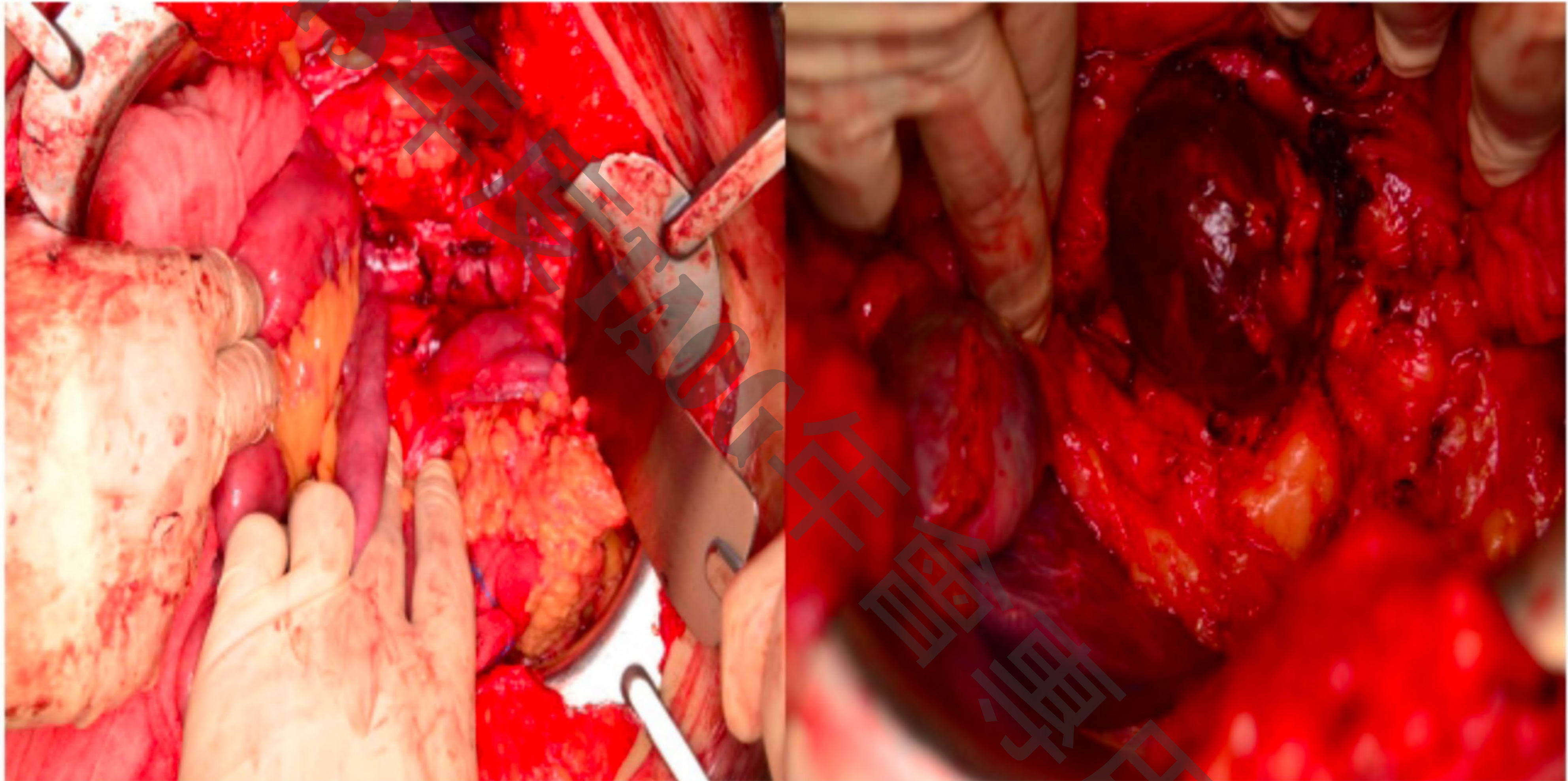
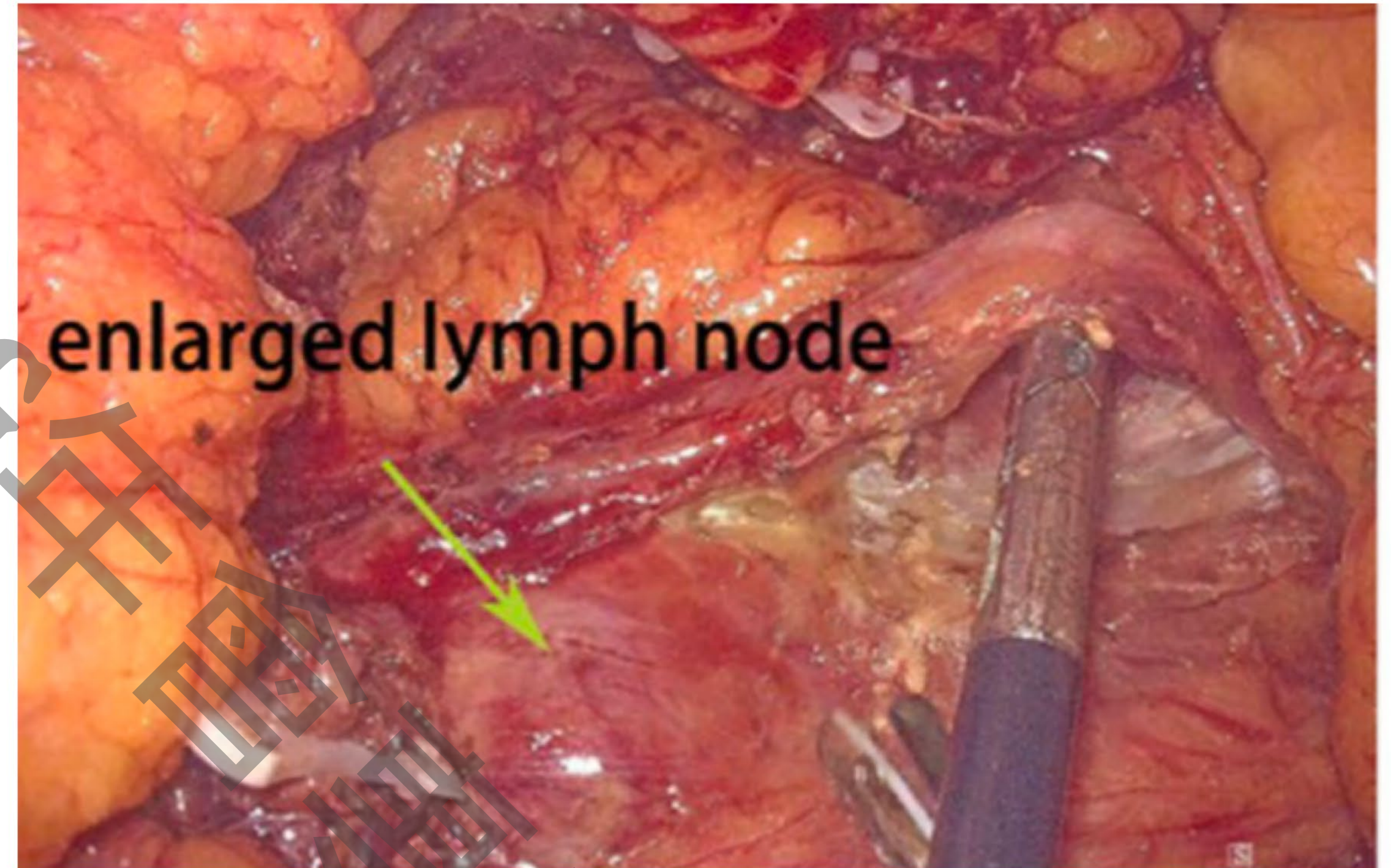
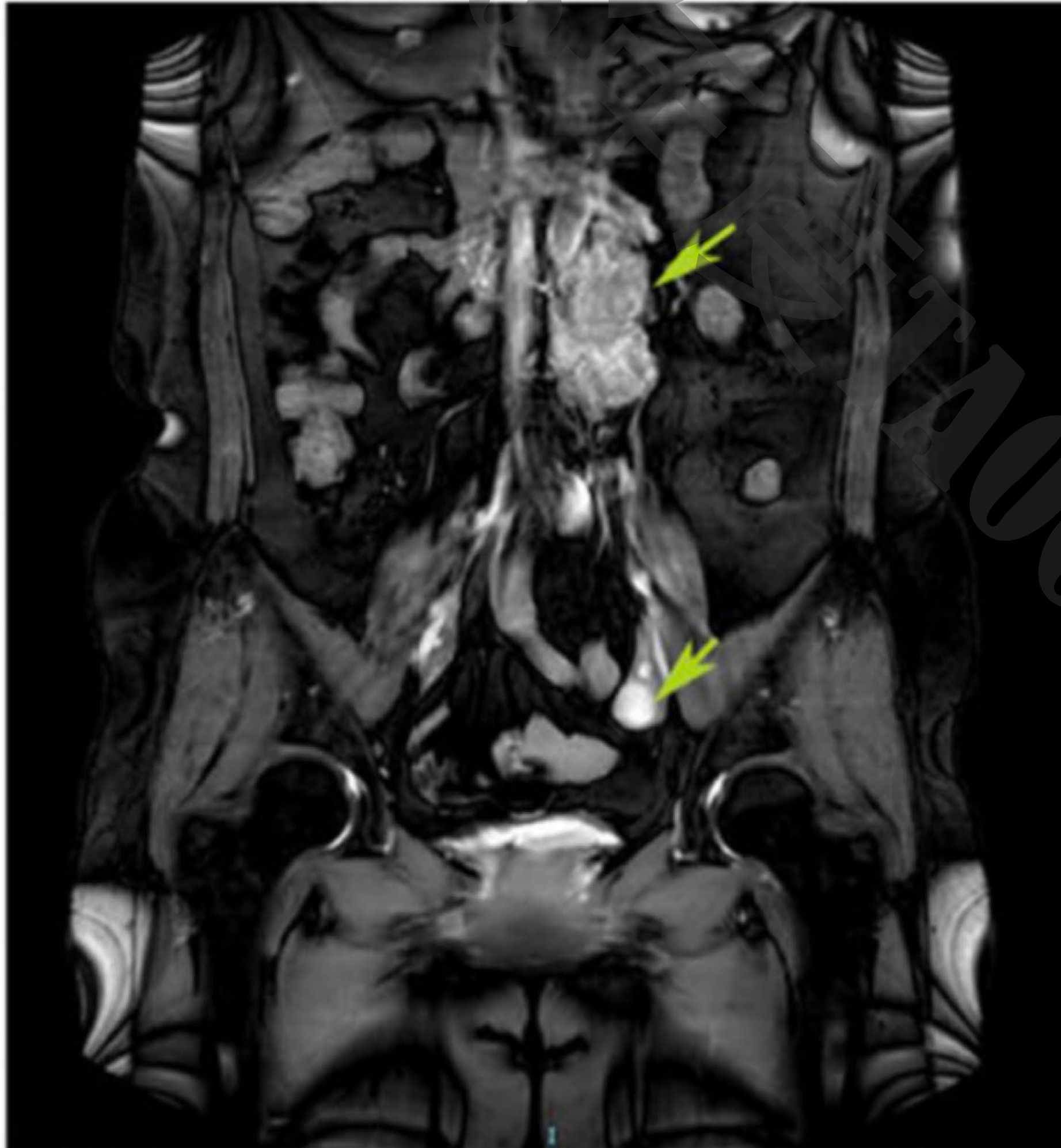


Figure 2 Surgery. Precaval lesion.

Endometriosis in para-aortic LN



Peritoneal TB



Figure 2 Contrast Enhanced CT of the pelvis. Moderate ascites with smooth thickening and strong enhancement of the peritoneum.



Figure 4 Contrast Enhanced CT of the abdomen. Matted bowel loops with mesenteric stranding and dense ascites (Hounsfield unit greater than fluid density).

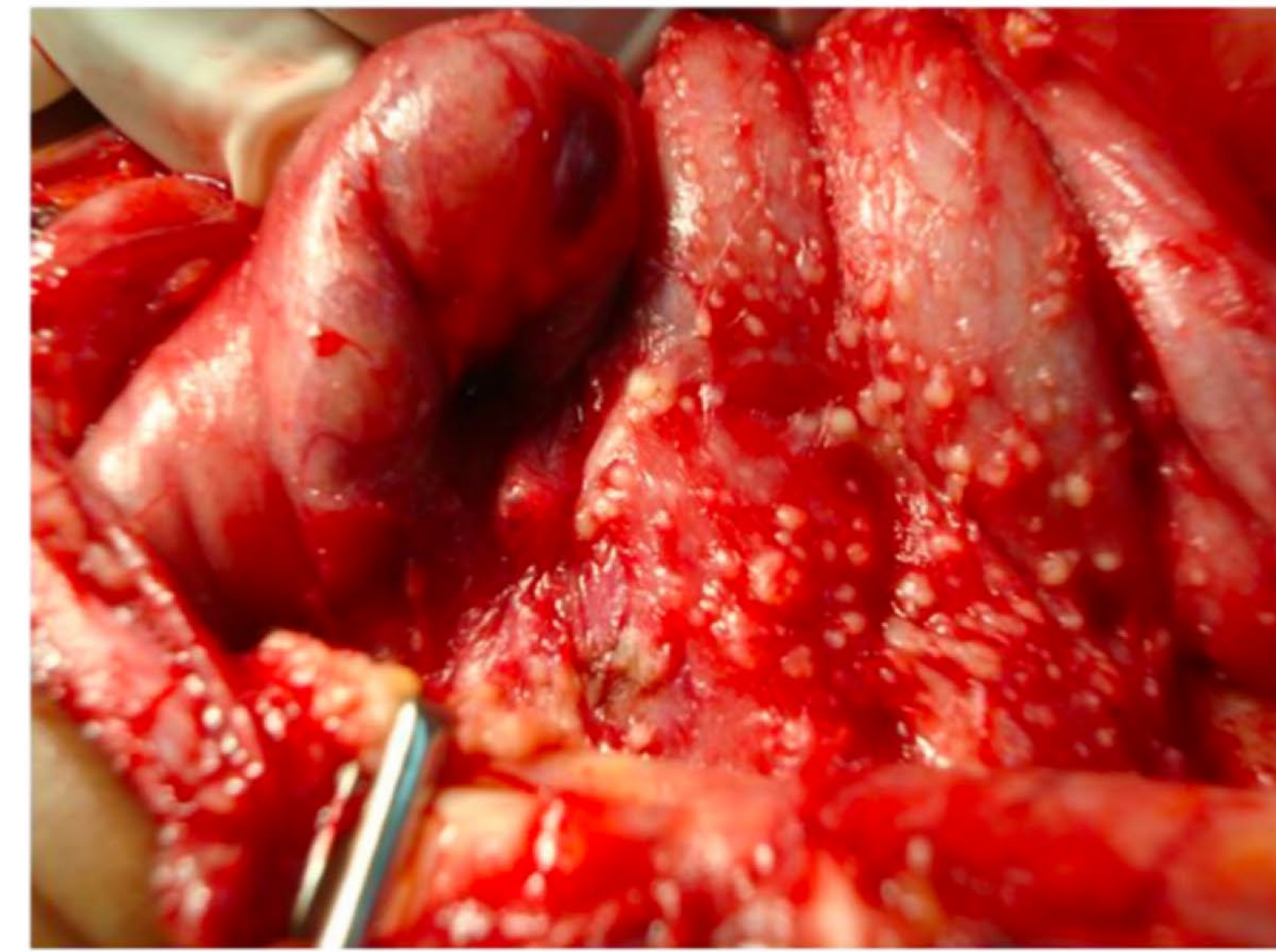


Figure 5 Intraoperative findings. Miliary seedlings on peritoneum and serosal surface of bowel with dense adhesions.



**How to Deal with Non-Cancerous
Conditions Mimicking Gynecologic
Malignancies?**

Cervical or abdominal-pelvic lesions mimicking malignant

- **For cervical lesions**
 - **Biopsy** for pathology assessment
- **For abdomino-pelvic lesions**
 - Biopsy / resection for **frozen section** (laparotomy or MIS)
 - CT-guided **biopsy**

For uterine lesions mimicking malignancy

- **Endometrial** => Endometrial biopsy / D&C / Hysteroscopy
- **Myometrial** => (if no concern of fertility) Hysterectomy
- Resection of **uterine sarcoma** (i.e., “myomectomy”) ?
 - Patients who underwent surgery with **tumor disruption** (i.e., myomectomy) resulted in **poorer outcomes** compared with *en bloc* tumor (i.e., hysterectomy)

For adnexal lesions mimicking malignancy

- **Adnexectomy** for frozen section (if no fertility concern)
 - How about non-adnexectomy resection ?
 - If iatrogenic leakage of tumor content => **upstaged** to at least stage IC1
- For **fertility-concerning** patients => **first exclude** the possibility of temporary physiologic changes (luteoma, OHSS, decidualization, etc)
 - To avoid unnecessary surgical impairment of **ovarian reserve and fallopian tube**
 - **Follow-up** for a while in less certain and asymptomatic patients

**How to improve the decision-making
before surgical intervention for
conditions mimicking GYN
malignancies?**

Clinical assessment

- **History**
 - Menstrual cycle
 - Pregnancy
 - Assisted reproductive technology
 - IUD history
 - Family history (e.g., TB environment?)
 - Travel history
- **Physical examination**
 - Infection
 - Inflammation

PET/CT

- FDG (2-[18F] flourodeoxyglucose)
 - the most utilized radiotracer in PET/CT
 - typically with high uptake in malignant cells
 - high sensitivity but low specificity for malignancy
 - benign processes with an inflammatory response are also FDG-avid
- SUV (standardized uptake value)
 - In general, an **SUV > 2.5** is considered suspicious for malignancy.

$$\text{SUV} = \frac{\text{Tissue activity (millicurie/milliliter)}}{\text{Injected dose (millicurie)/weight (grams)}}$$

Menstrual cycle and FDG uptake in female pelvic region

- **Two peaks:** (1) in the initial days of menstruation, (2) around ovulation
- In older **post-menopausal** ladies, physiological FDG uptake is normally not seen in the uterus or ovaries
- PET should optimally **be scheduled within** a week before or few days after menstruation

PET/CT and GYN cancers

- **Uterine carcinoma and sarcoma**
 - generally seen with intense FDG uptake
 - However, the highly variable FDG uptake in leiomyomas makes it difficult to reliably differentiate from uterine malignancies
- **Cervical cancer**
 - usually FDG-avid regardless of histologic subtype
 - Benign cystic lesions with FDG uptake due to inflammation/infection such as uterine cervicitis can be difficult to differentiate

PET/CT and Ovarian Lesions

- **Benign serous and mucinous cystadenomas**
 - usually with **no/mild** FDG uptake
- **Borderline tumors**
 - **difficulty** in differentiating between benign and borderline tumors
- **Ovarian cancer**
 - the solid components are typically with **pathological FDG-uptake**
 - high FDG accumulation within the ascites fluid
 - intense FDG uptake can be seen in metastatic lymph node
 - detection of peritoneal disease was comparable with MRI
 - sub-centimeter lesions are not always detectable on PET

DWI-MRI (Diffusion-Weighted Imaging)

- An adapted T2-weighted sequence (no need for contrast material)
- “**Functional**” information
 - **Diffusivity** of water molecules (mainly depend on **tumor cellularity**)
- In **routine MRI protocols** for several cancers
- Tested in almost all cancers
 - To differentiate malignant from benign lesions
 - To distinguish different histotypes or tumor grades
 - To predict / assess treatment response
 - To identify residual / recurrent tumors

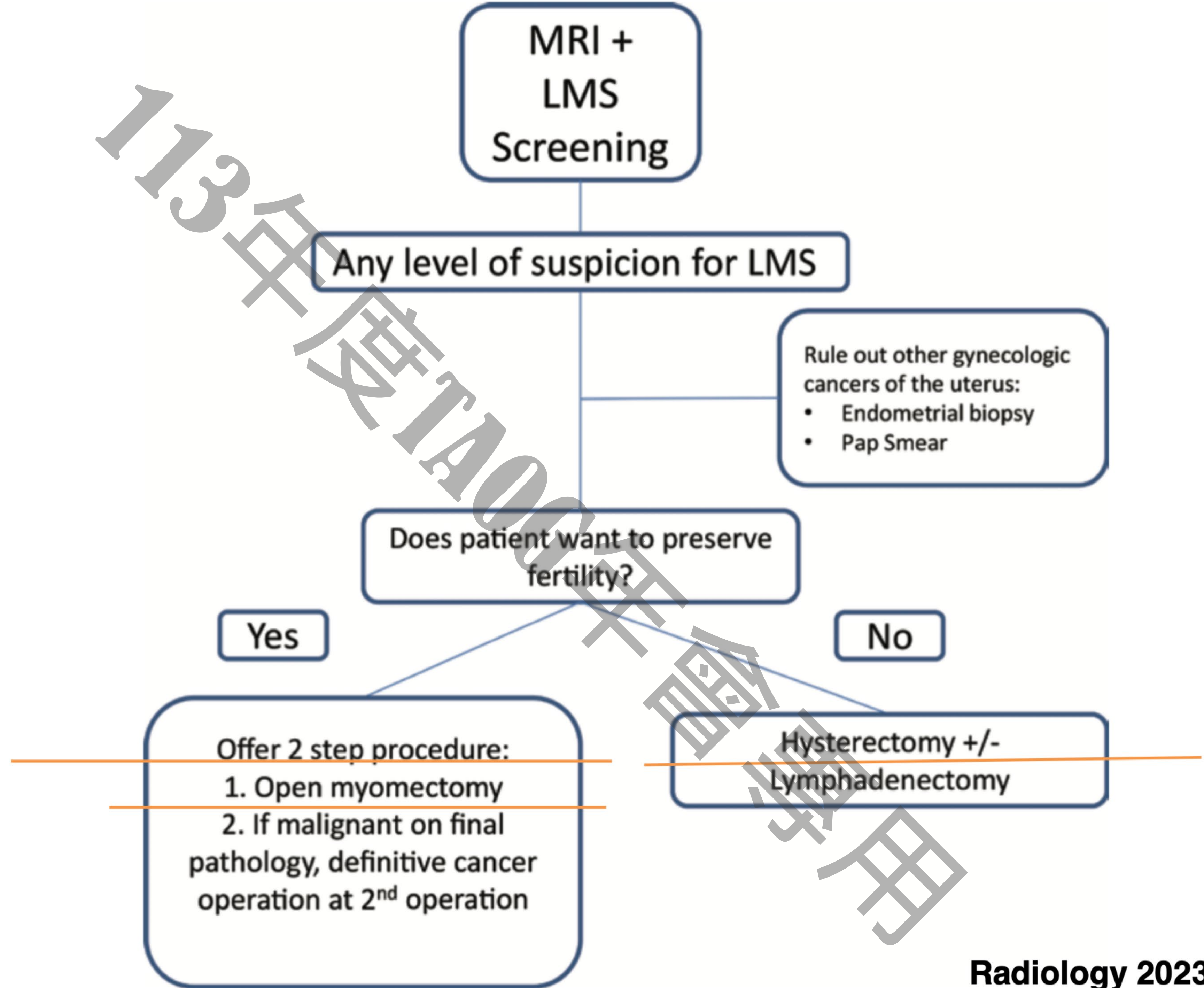
DWI-MRI (Diffusion-Weighted Imaging)

- Most tumors show restricted water diffusion as a result of high cellularity
- **ADC (apparent diffusion coefficient)**
 - Describes tissue signal attenuation with increasing *b*-values
- **Endometrial cancer**
 - **Lower ADCs** than normal endometrium (cut-off ADC values of $1.15 \times 10^{-3} \text{ mm}^2/\text{sec}$)⁻⁾
 - Even lower ADCs in **high-grade** cancers
 - Better assessment in myometrial invasion than T2W alone

MRI Evaluation of Uterine Masses for Risk of Leiomyosarcoma: A Consensus Statement

- T2-weighted imaging
+
• diffusion-weighted imaging (DWI) with a *b* value of 1000 sec/mm², and apparent diffusion coefficient (ADC) mapping

==> **accuracy** of 88%–95% for detecting uterine LMS (sensitivity of 83%~100%, specificity of 88%~100%)



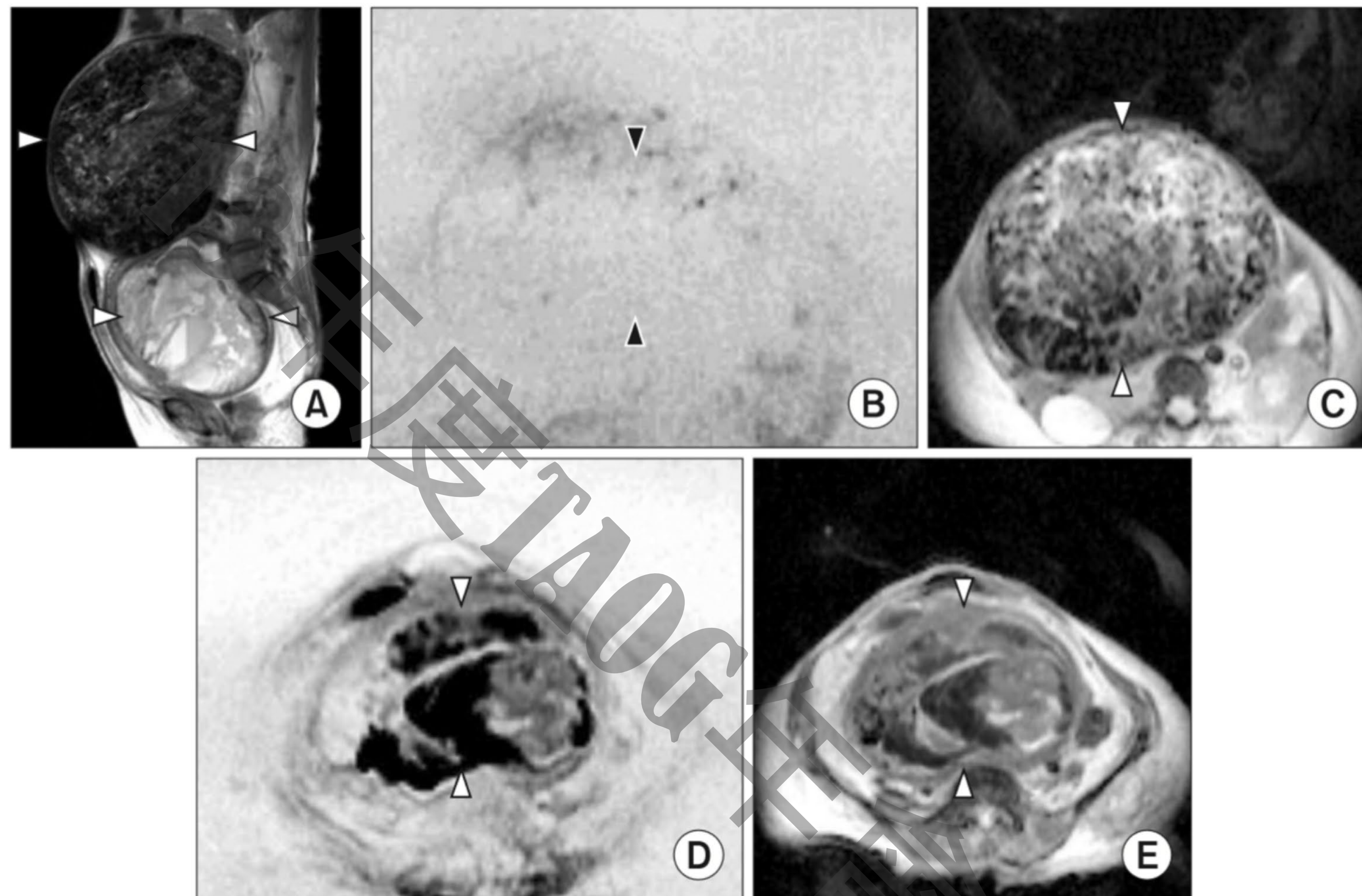


Fig. 3. Uterine leiomyosarcoma and leiomyoma in a 72-year-old woman. Sagittal T2-weighted imaging shows an enlarged uterus with two solid lesions (arrowheads) (A). The upper lesion (arrowheads) shows low signal intensity on axial diffusion-weighted imaging (DWI) (B) and the apparent diffusion coefficient (ADC) map (C) demonstrated high ADC values ($2.13 \times 10^{-3} \text{ mm}^2/\text{sec}$). The lower lesion (arrowheads) shows high signal intensity on axial DWI (D) and the ADC map (E) demonstrated low ADC values ($0.67 \times 10^{-3} \text{ mm}^2/\text{sec}$). Pathological examination revealed leiomyoma in the upper lesion and leiomyosarcoma in the lower lesion.

DWI-MRI for Cervical Cancer

- Cut-off ADC values of $1.4 \times 10^{-3} \text{ mm}^2/\text{sec}$
- DWI+T2W **better than T2W** in :
 - Detecting **parametrial** invasion and **peritoneal** spread
 - Assessing tumor **size**
 - Small cancers' detection after biopsy (post-biopsy inflammation may alter the anatomy)
- Predictor of good response to RT
 - Low pre-treatment ADC
 - Early ADC increase during RT



Fig. 2. Postoperative vaginal cuff recurrence of stage IVB endometrial carcinoma in a 66-year-old woman. Axial T2-weighted imaging shows a slightly high-signal lesion (arrowhead) on the right side of vaginal cuff (A). Axial diffusion-weighted imaging clearly depicts the lesion (B) and the apparent diffusion coefficient (ADC) map (not shown) demonstrated low ADC values ($0.91 \times 10^{-3} \text{ mm}^2/\text{sec}$). The lesion is difficult to distinguish on contrast-enhanced-computed tomography (C).

DWI-MRI for Ovarian Cancer

- A cut-off ADC of $1.15 \times 10^{-3} \text{ mm}^2/\text{sec}$:
 - distinguish benign from malignant/borderline malignant lesions with 74% sensitivity and 80% specificity
- The role of DWI is **controversial** in distinguishing metastatic lymph node
- DWI + traditional MRI are helpful to identify peritoneal implant
 - Sensitivity 84%, specificity 90%
 - **Better than** CT or traditional MRI for small implants on the surface of bowel and solid viscera

Risk Stratification Systems of the Adnexa

- the Ovarian-adnexal Reporting and Data System (**O-RADS**)
- the Gynecologic Imaging Reporting and Data System (**GI-RADS**)
- Assessment of Different NEoplasias in the adneXa (**ADNEX**)
- International Tumor Analysis Group (**IOTA**) simple rules

O-RADS

by American College of Radiology (ACR)

TABLE 1: Ovarian-Adnexal Reporting and Data System (O-RADS) for Ultrasound Assessment Categories and Associated Risk of Malignancy

Category	Assessment	Risk of Malignancy (%)
0	Technically incomplete	NA
1	Physiologic, normal	0
2	Almost certainly benign	< 1
3	Low risk	1 to < 10
4	Intermediate risk	10 to < 50
5	High risk	≥ 50

Note—NA = not applicable.

APP for O-RADS

◆ Apple APP Store

◆ Google Play

◆ Search for “**ACR Guidance**”





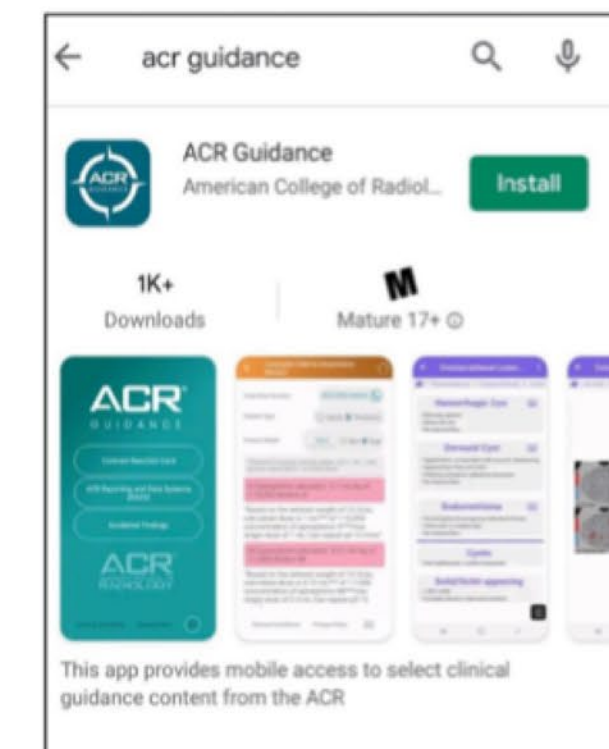
- The ACR® Guidance App provides interactive mobile access to select clinical guidance content from the ACR website. Download to access the ACR Contrast Reaction Cards, Reporting and Data Systems (RADS), and Incidental Findings (IF) content.

This app is intended for healthcare professionals such as radiologists, oncologists, referring physicians, and medical students who desire on the go reference materials from ACR. This app is not a medical device and should not be considered as one.

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Install the app (Android)

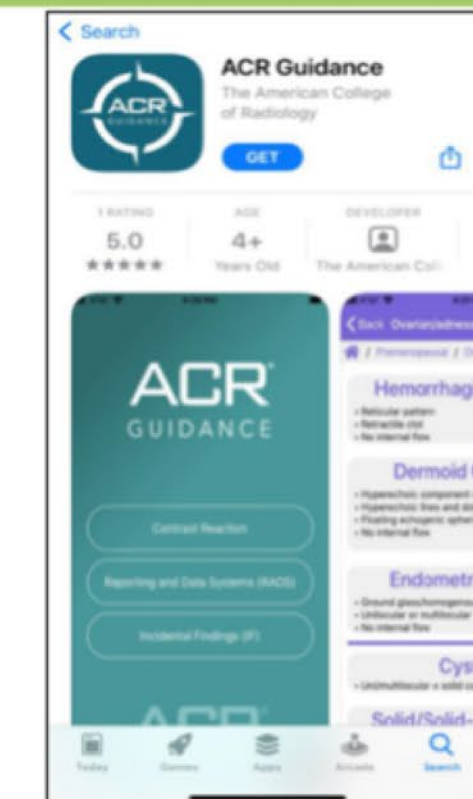
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OR
- Scan the barcode from your Android device 
- Open the app and select the program to access the clinical guidance content



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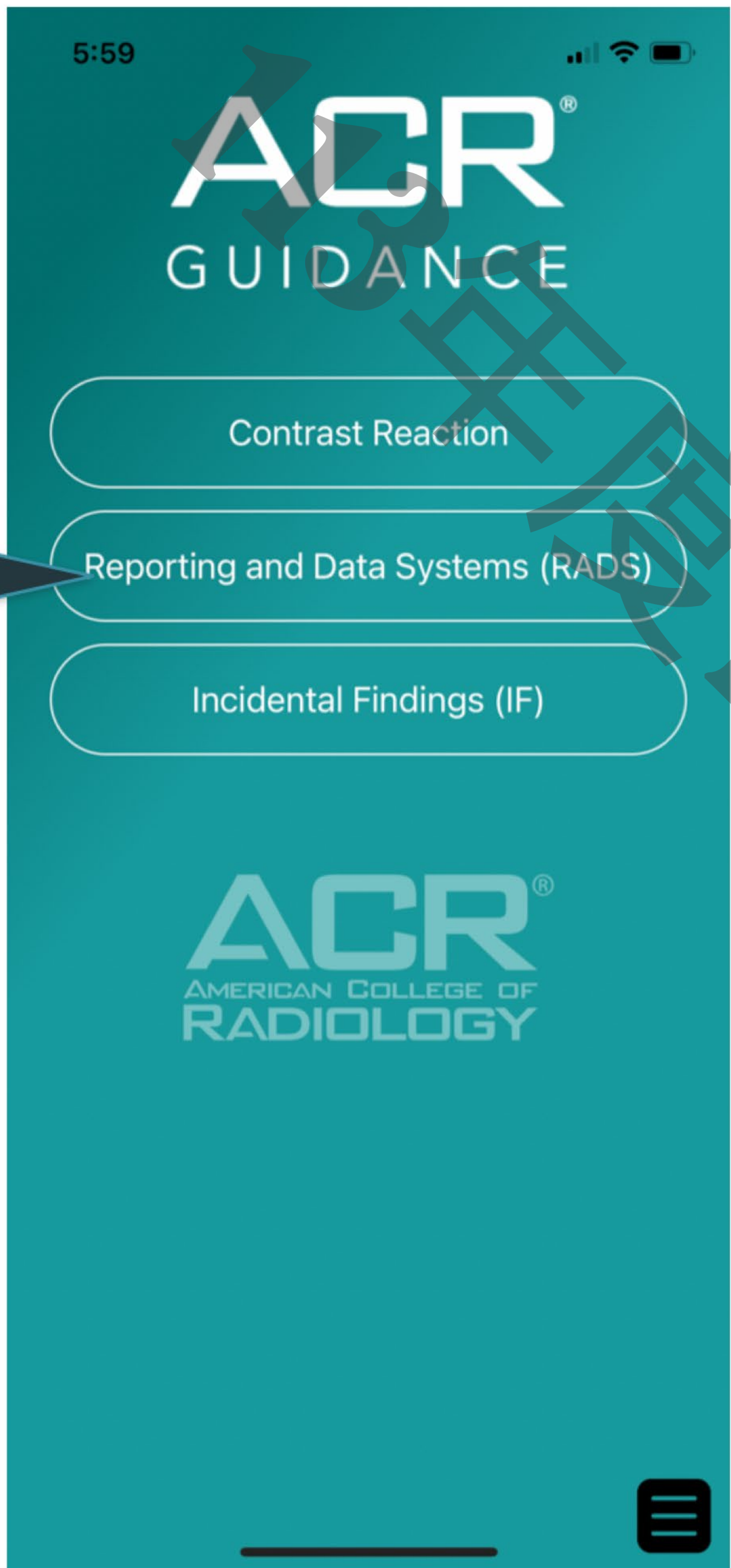
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OR
- Scan the barcode from your Apple device 
- Open the app and Select the program to access the clinical guidance content

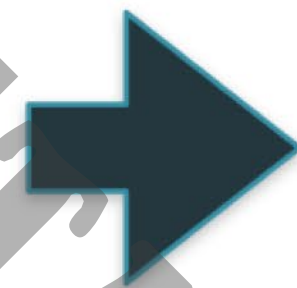


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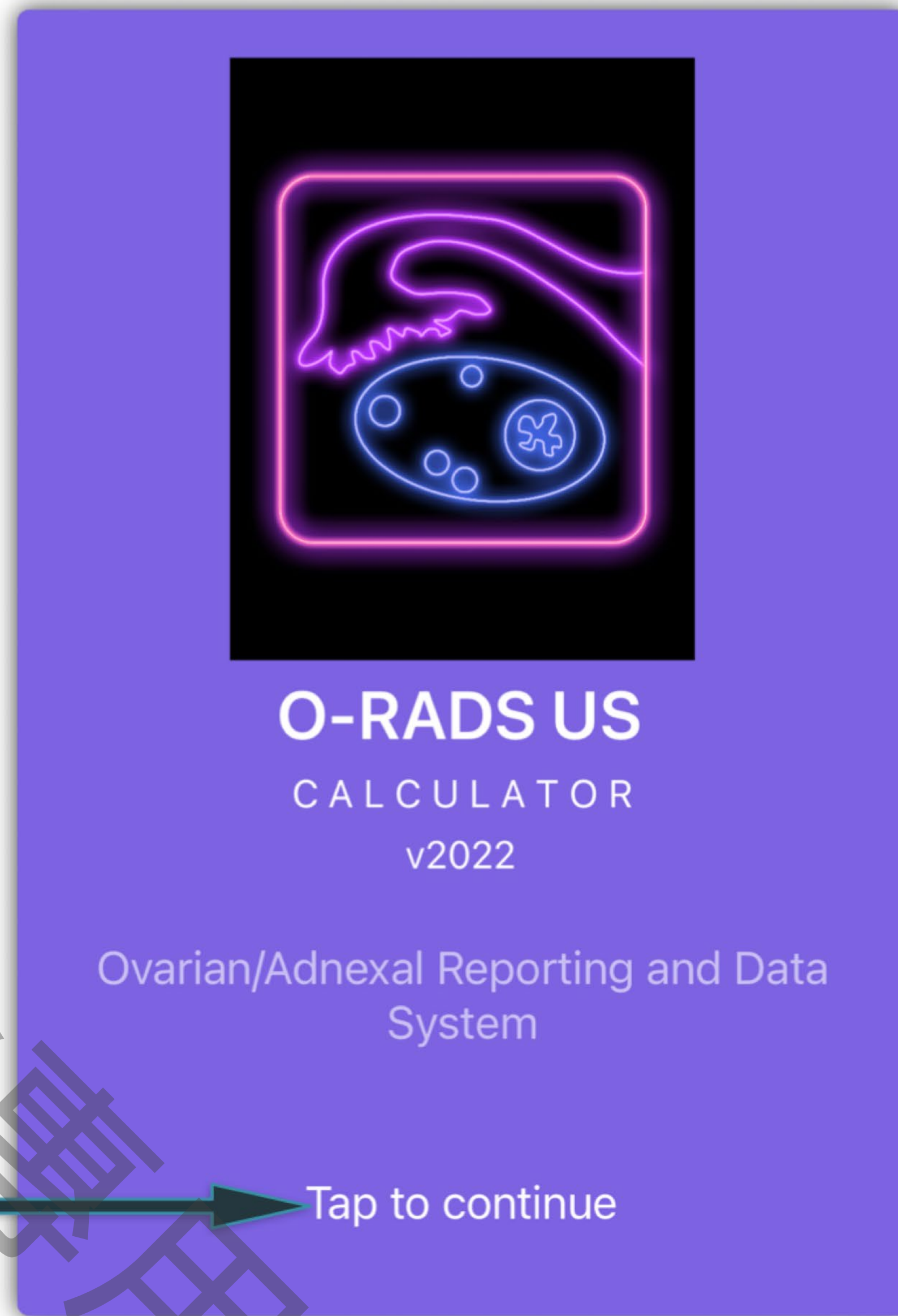
點選之



然後



點選之



開始根據患者的狀況點選,然後逐頁進行

Location

Ovarian/Adnexal

Extraovarian*

*If location uncertain, select "Ovarian/Adnexal"

完成逐頁點選之後的風險評估與建議

O-RADS 5
High Risk
≥ 50% ROM

Management:

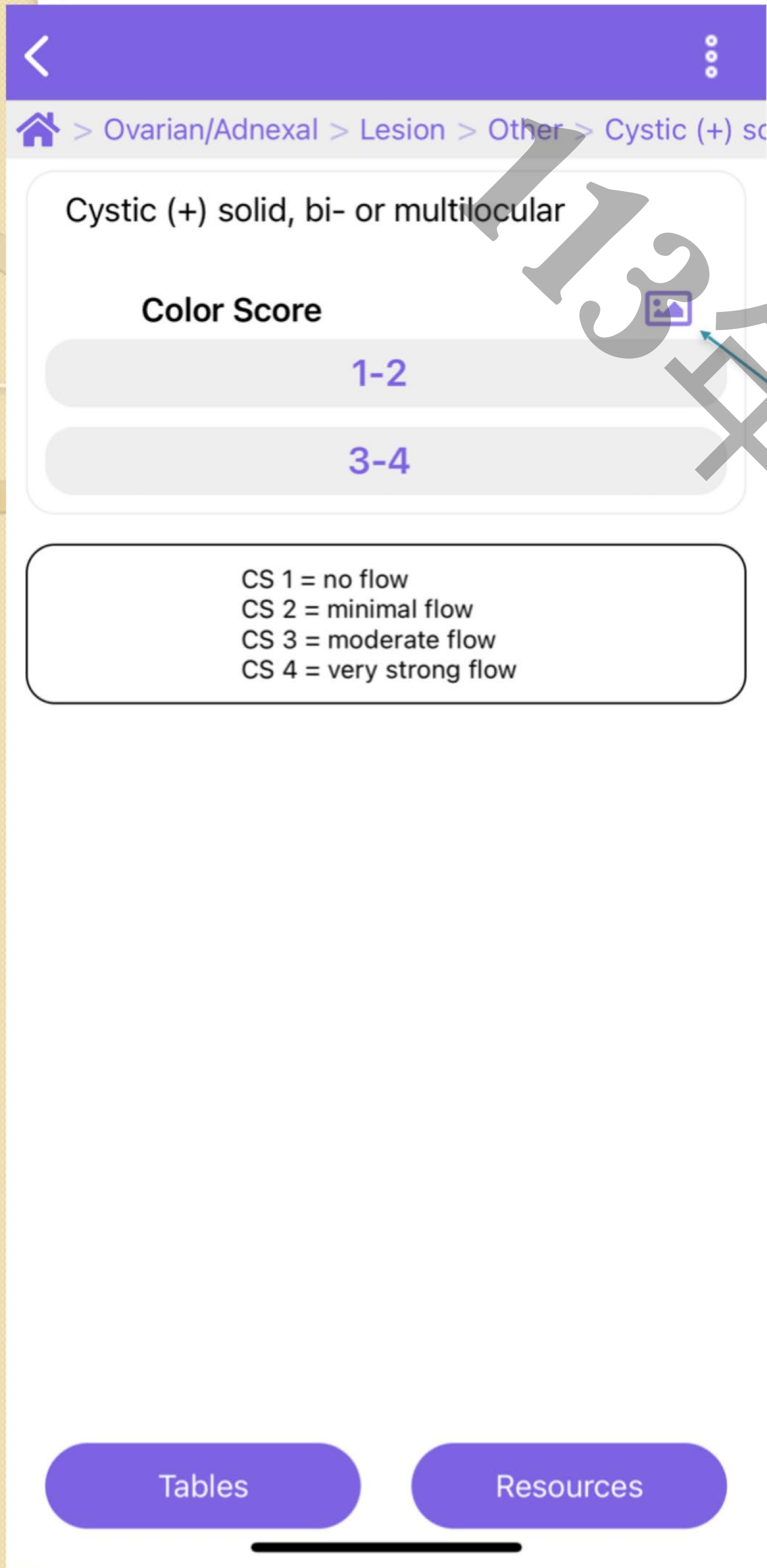
Imaging: Per gyn-oncologist protocol

Clinical: Gyn-oncologist

Enter New Finding

Tables Resources

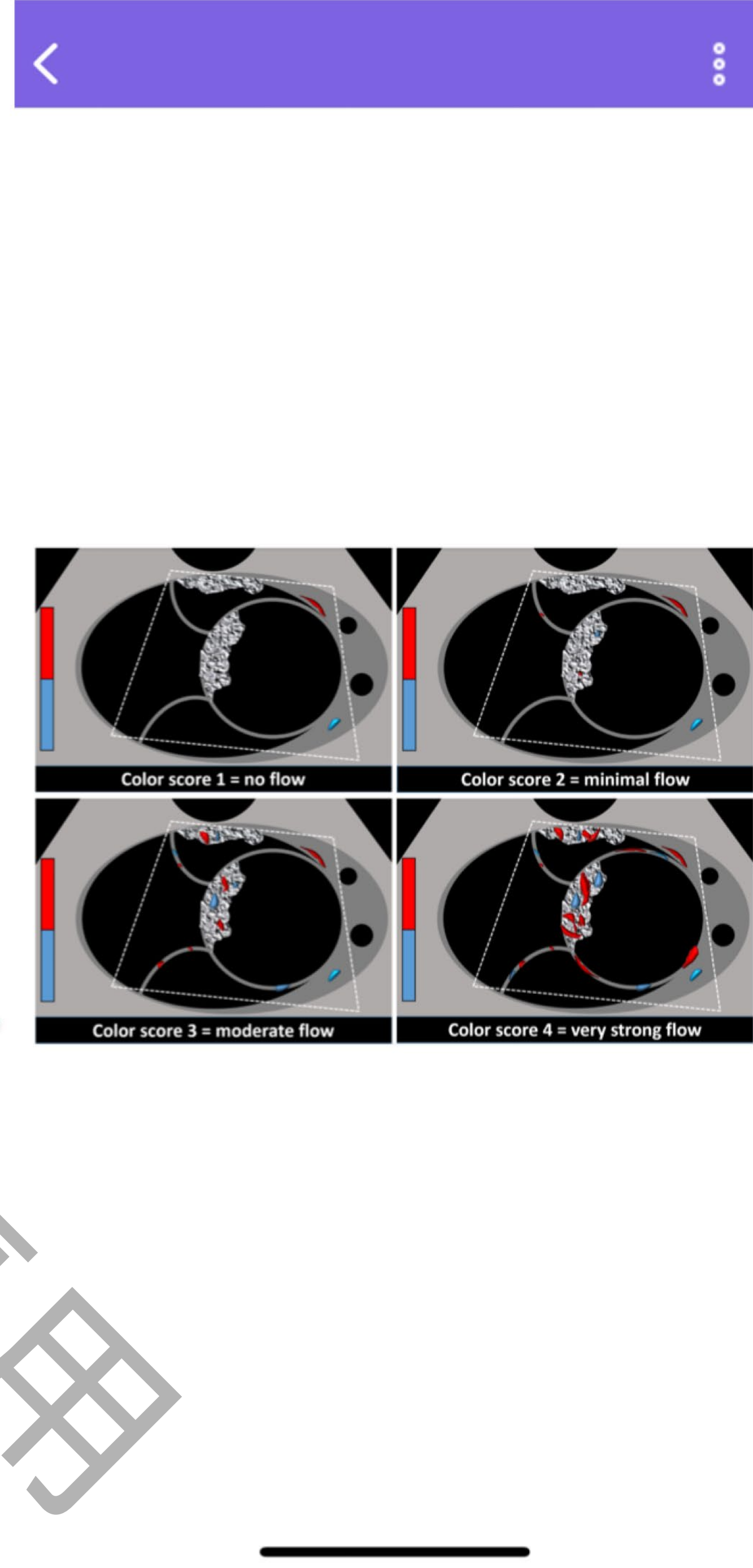
Tables Resources



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簡單說明
隨即呈現



Other lesion

Cystic (-) solid component(s)*

Cystic (+) solid component(s)*

Solid

≥ 80% solid, ± flow

Excludes blood or dermoid contents

*Solid component = protrudes off wall or septation ≥ 3 mm into cyst lumen. If < 3 mm, select "Cystic (-) solid component(s)"

NOTE: Discriminatory size of 3 mm refers to height (projection into cyst lumen), not max dimension

Tables

Resources

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詳細說明
隨即呈現

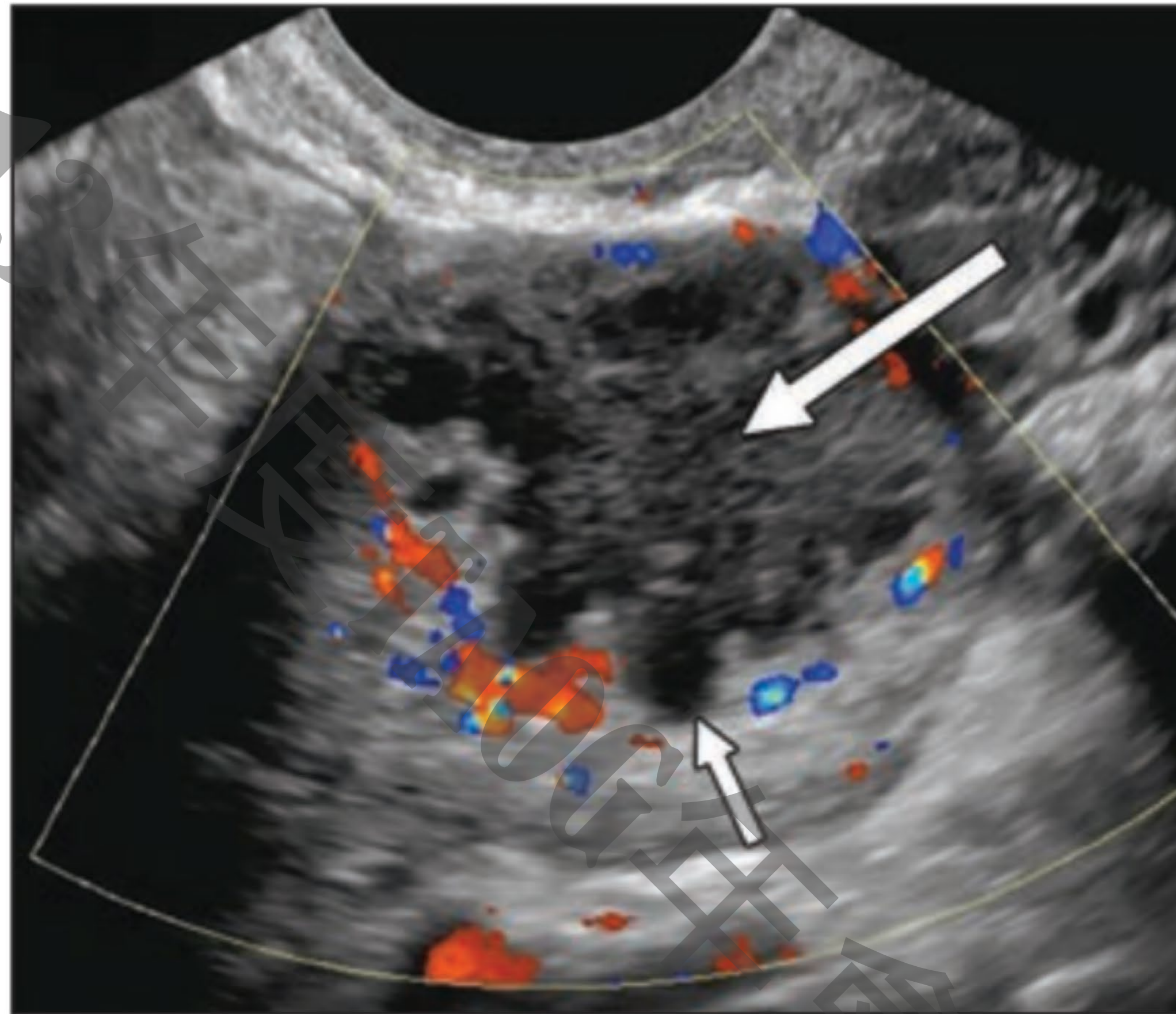
American College of Radiology O-RADS™ US v2022 — Assessment Categories Release Date: November 2022

O-RADS Score	Risk Category [IOTA Model]	Lexicon Descriptors	Management			
			Pre-menopausal	Post-Menopausal		
0	Incomplete Evaluation [N/A]	Lesion features relevant for risk stratification cannot be accurately characterized due to technical factors	Repeat US study or MRI			
1	Normal Ovary [N/A]	No ovarian lesion Physiologic cyst: follicle (≤3 cm) or corpus luteum (typically ≤3 cm)	None			
2	Almost Certainly Benign (<1%)	Simple cyst	≤3 cm	N/A (see follicle)	None	
			>3 cm to 5 cm	None	Follow-up US in 12 months*	
			>5 cm but <10 cm	Follow-up US in 12 months*		
			>3 cm but <10 cm	None	Follow-up US in 12 months*	
3	Low Risk [1 – <10%]	Unilocular, smooth, non-simple cyst (internal echoes and/or incomplete septations)	≤3 cm	None	Follow-up US in 12 months*	
		Bilocular, smooth cyst	>3 cm but <10 cm	Follow-up US in 6 months*		
		Typical benign ovarian lesion (see "Classic Benign Lesions" table) Typical benign extraovarian lesion (see "Classic Benign Lesions" table)	<10 cm Any size	See "Classic Benign Lesions" table for descriptors and management		
4	Intermediate Risk [10 – <50%]	Typical benign ovarian lesion (see "Classic Benign Lesions" table), ≥10 cm	Imaging: • If not surgically excised, consider follow-up US within 6 months** • If solid, may consider US specialist (if available) or MRI (with O-RADS MRI score)† Clinical: Gynecologist			
		Uni- or bilocular cyst, smooth, ≥10 cm				
		Unilocular cyst, irregular, any size				
		Multilocular cyst, smooth, <10 cm, CS <4				
5	High Risk [≥50%]	Solid lesion, ± shadowing, smooth, any size, CS = 1				
		Solid lesion, shadowing, smooth, any size, CS 2-3				
		Bilocular cyst without solid component(s)	Irregular, any size, any CS	Imaging: Options include: • US specialist (if available) or • MRI (with O-RADS MRI score)† or • Per gyn-oncologist protocol Clinical: Gynecologist with gyn-oncologist consultation or solely by gyn-oncologist		
		Multilocular cyst without solid component(s)	Smooth, ≥10 cm, CS <4			
		Smooth, any size, CS 4				
		Irregular, any size, any CS				
		<4 pps or solid component(s) not considered a pp; any size, any CS				
		Bi- or multilocular cyst with solid component(s)	Any size, CS 1-2			
		Solid lesion, non-shadowing	Smooth, any size, CS 2-3			
		Unilocular cyst, ≥4 pps, any size, any CS				
		Bi- or multilocular cyst with solid component(s), any size, CS 3-4				
		Solid lesion, ± shadowing, smooth, any size, CS 4				
		Solid lesion, irregular, any size, any CS	Imaging: Per gyn-oncologist protocol Clinical: Gyn-oncologist			
		Ascites and/or peritoneal nodules††				

GLOSSARY
Smooth and irregular: refer to inner walls/septation(s) for cystic lesions, and outer contour for solid lesions; irregular inner wall for cysts = <3 mm in height
Shadowing: must be diffuse or broad to qualify; excludes refractive artifact
CS = color score; degree of intralésional vascularity; 1 = none, 2 = minimal flow, 3 = moderate flow, 4 = very strong flow
Postmenopausal = ≥1 year amenorrhea (early = <5 yrs; late = ≥5 yrs); if uncertain or uterus surgically absent, use age >50 years (early = >50 yrs but <55 yrs, late = ≥55 yrs)
*Shorter imaging follow-up may be considered in some scenarios (eg, clinical factors). If smaller (≥10-15% decrease in average linear dimension), no further surveillance. If stable, follow-up US at 24 months from initial exam. If enlarging (≥10-15% increase in average linear dimension), consider follow-up US at 12 and 24 months from initial exam, then management per gynecology. For changing morphology, reassess using lexicon descriptors. Clinical management with gynecology as needed.
**There is a paucity of evidence for defining the optimal duration or interval for imaging surveillance. Shorter follow-up may be considered in some scenarios (eg, clinical factors). If stable, follow-up at 12 and 24 months from initial exam, then as clinically indicated. For changing morphology, reassess using lexicon descriptors.
† MRI with contrast has higher specificity for solid lesions, and cystic lesions with solid component(s).
†† Not due to other malignant or non-malignant etiologies; specifically, must consider other etiologies of ascites in categories 1-2.
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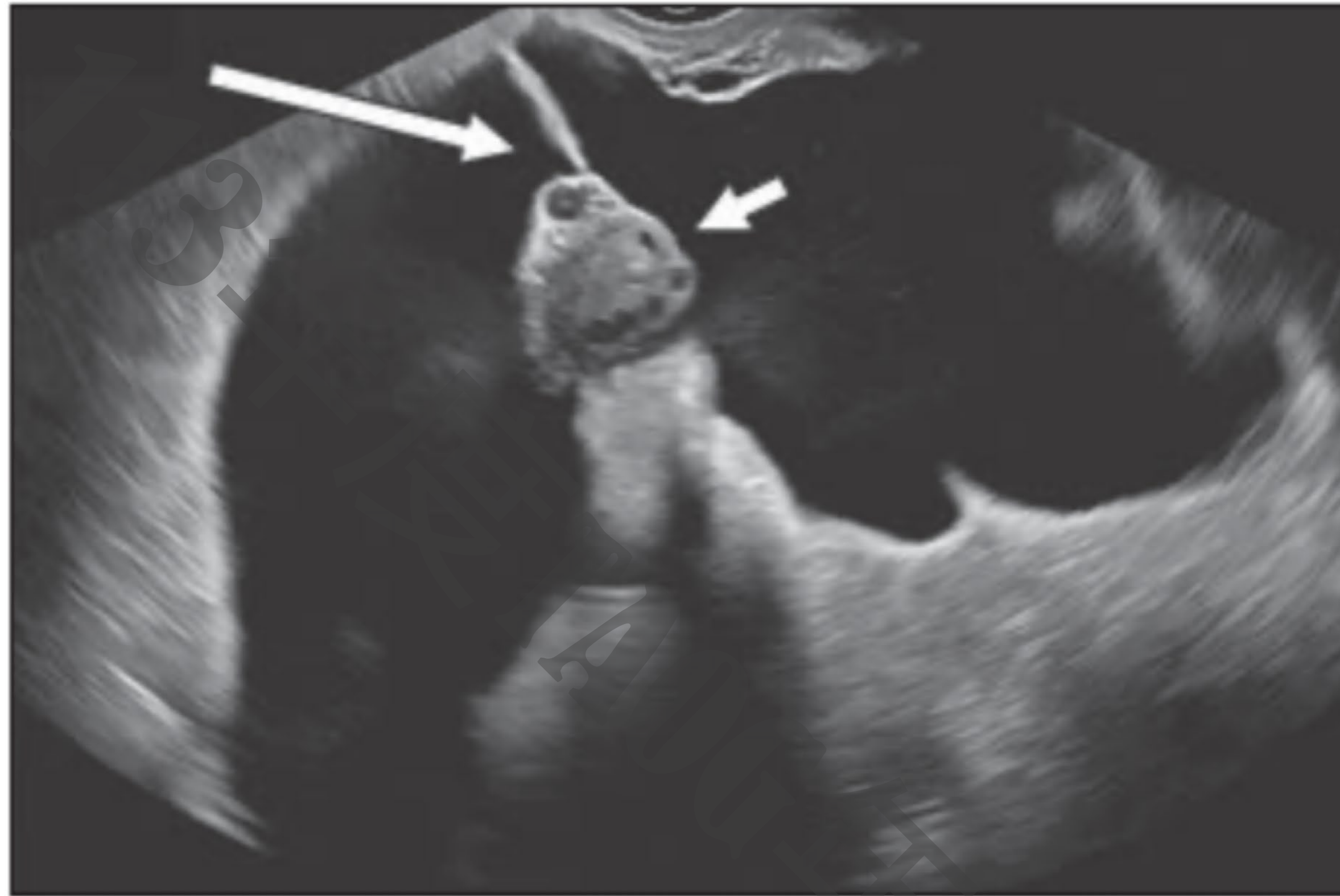
American College of Radiology O-RADS™ US v2022 — Classic Benign Lesions Release Date: November 2022

Lesion	Descriptors and Definitions For any atypical features on initial or follow-up exam, use other lexicon descriptors (eg, unilocular, multilocular, solid, etc.)	Management If sonographic features are only suggestive, and overall assessment is uncertain, consider follow-up US within 3 months
Typical Hemorrhagic Cyst	Unilocular cyst, no internal vascularity*, and at least one of the following: • Reticular pattern (fine, thin intersecting lines representing fibrin strands) • Retractable clot (intracystic component with straight, concave, or angular margins)	Imaging: o Premenopausal: • ≤5 cm: None • >5 cm but <10 cm: Follow-up US in 2-3 months o Early postmenopausal (<5 years): • <10 cm, options to confirm include: • Follow-up US in 2-3 months or • US specialist (if available) or • MRI (with O-RADS MRI score) o Late postmenopausal (≥5 years): • Should not occur; recategorize using other lexicon descriptors Clinical: Gynecologist**

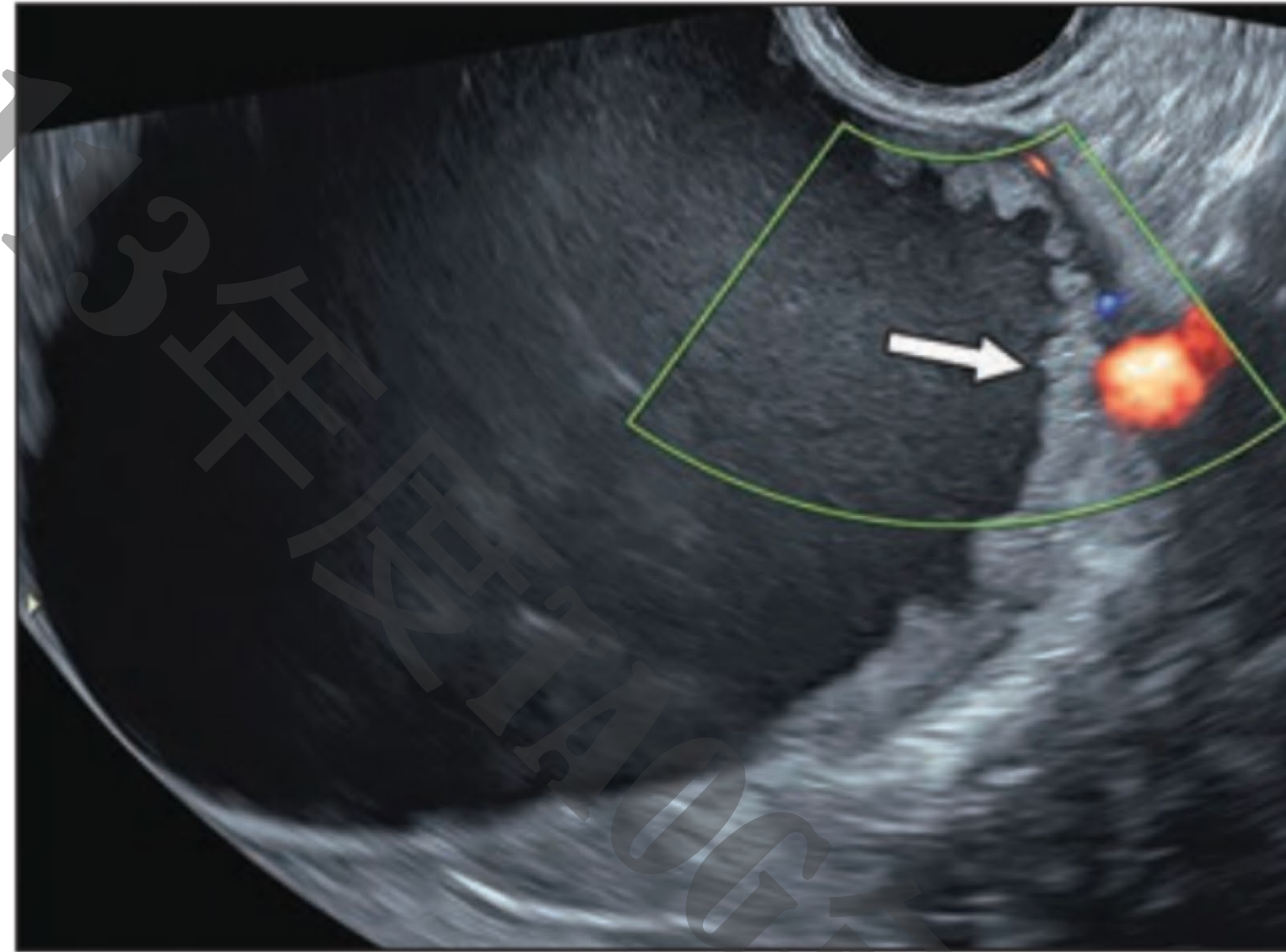


B

B, 35-year-old woman with abnormal uterine bleeding and corpus luteum. Color Doppler ultrasound image shows left ovarian cyst with internal echoes (*long arrow*), crenulated inner margin (*short arrow*), and peripheral vascularity as different manifestation of corpus luteum (O-RADS 1).

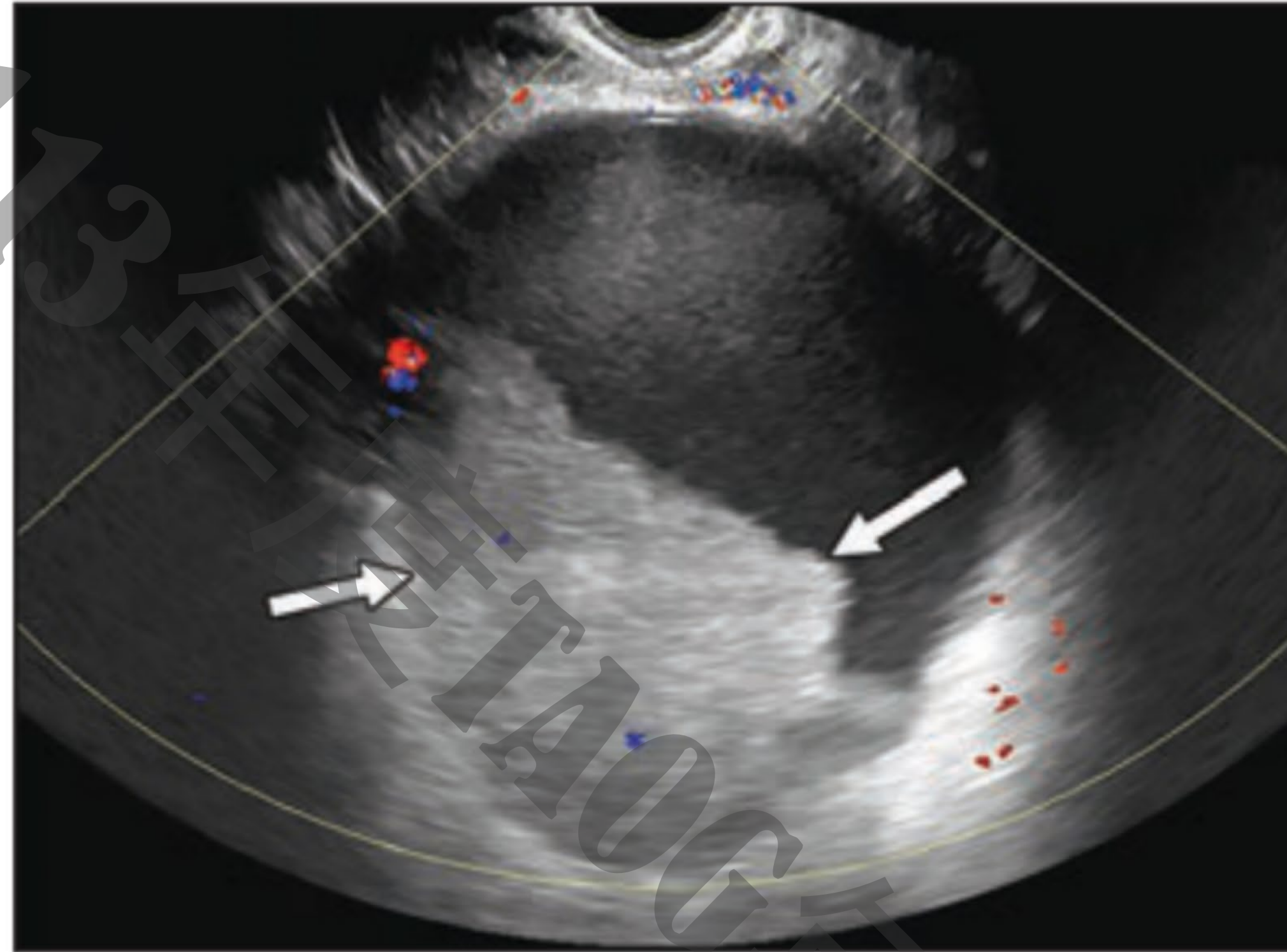


C, 28-year-old pregnant woman with history of appendectomy presenting for first trimester evaluation, at which right peritoneal inclusion cyst was incidentally detected. Ultrasound image shows characteristic imaging features: fluid collection without mass effect, which conforms to adjacent pelvic organs; suspended ovary (*short arrow*); and adjacent septation (*long arrow*) that represents adhesion. Care should be taken not to mistake ovary for solid component. Peritoneal inclusion cysts are classic benign lesions (O-RADS 2).



A

A, 46-year-old woman with pelvic fullness due to mucinous cystadenoma. Color Doppler ultrasound image shows right ovarian unilocular cyst with inner wall irregularity (*arrow*) consistent with Ovarian-Adnexal Reporting and Data System (O-RADS) category 3 lesion. Wall irregularity does not protrude more than 3 mm into cyst lumen and hence does not meet criteria for solid component or papillary projection.



B

B, 22-year-old woman with mixed germ cell tumor and right pelvic pain. Color Doppler ultrasound image shows unilocular cyst in right ovary with vascularized solid component (*arrows*) that is sessile and hence does not meet criteria for papillary projection. Assessment is O-RADS category 4.

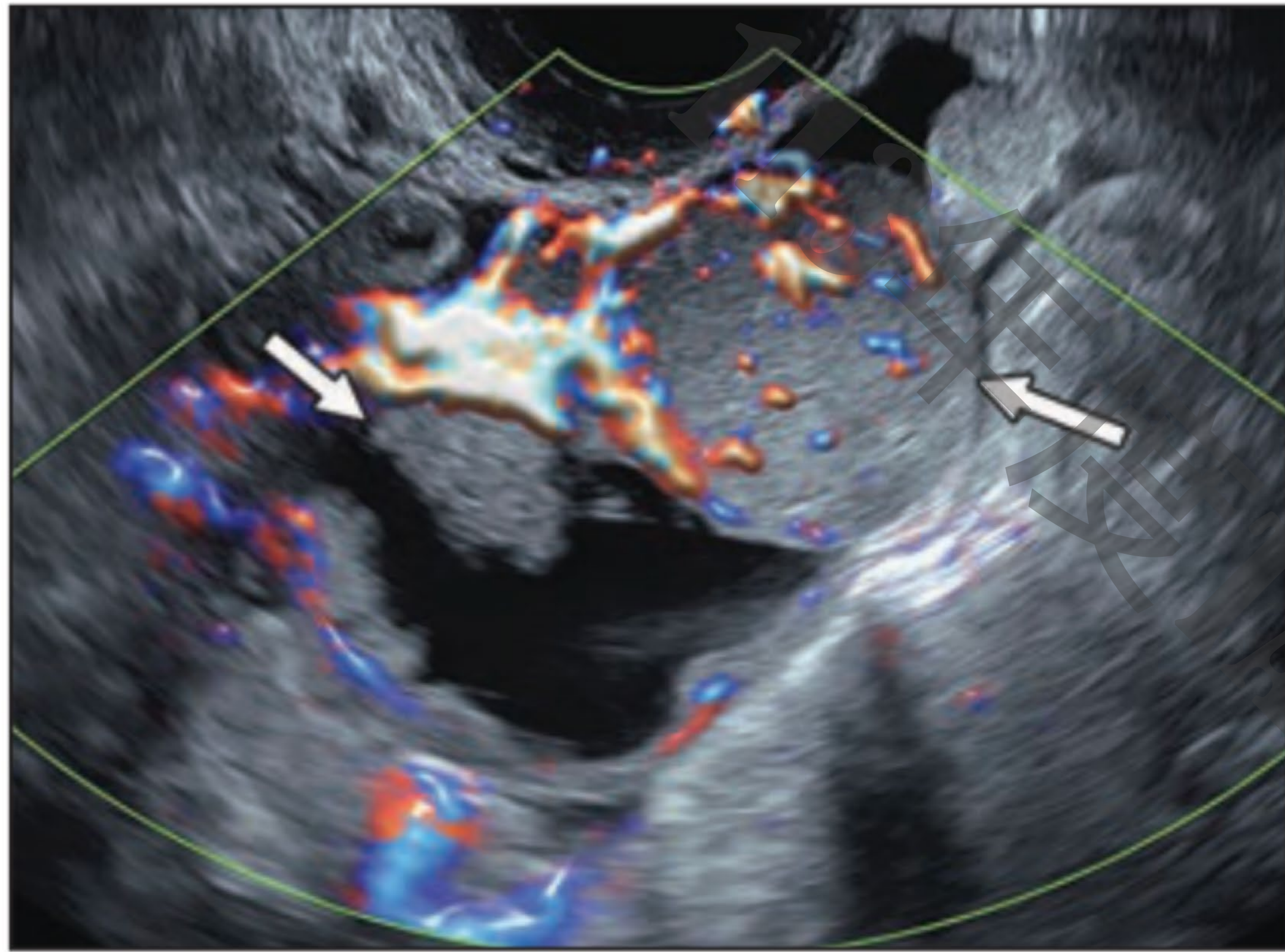
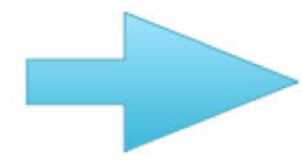


Fig. 11—67-year-old woman with weight loss. Color Doppler ultrasound image shows multilocular cystic lesion with large, solid, vascularized components (*arrows*) proven to be high-grade serous tubal carcinoma. Color score (CS) is important for appropriate Ovarian-Adnexal Reporting and Data System (O-RADS) categorization of multilocular cystic lesions with solid components. Color Doppler imaging shows very strong flow (CS 4) consistent with O-RADS category 5 lesion. Size is irrelevant for risk stratification of lesions with these features. Distinction between papillary projection and nonpapillary solid component is not relevant for O-RADS categorization of multilocular cystic lesions.

**Image Assessment
vs.**

Ultimate Reality

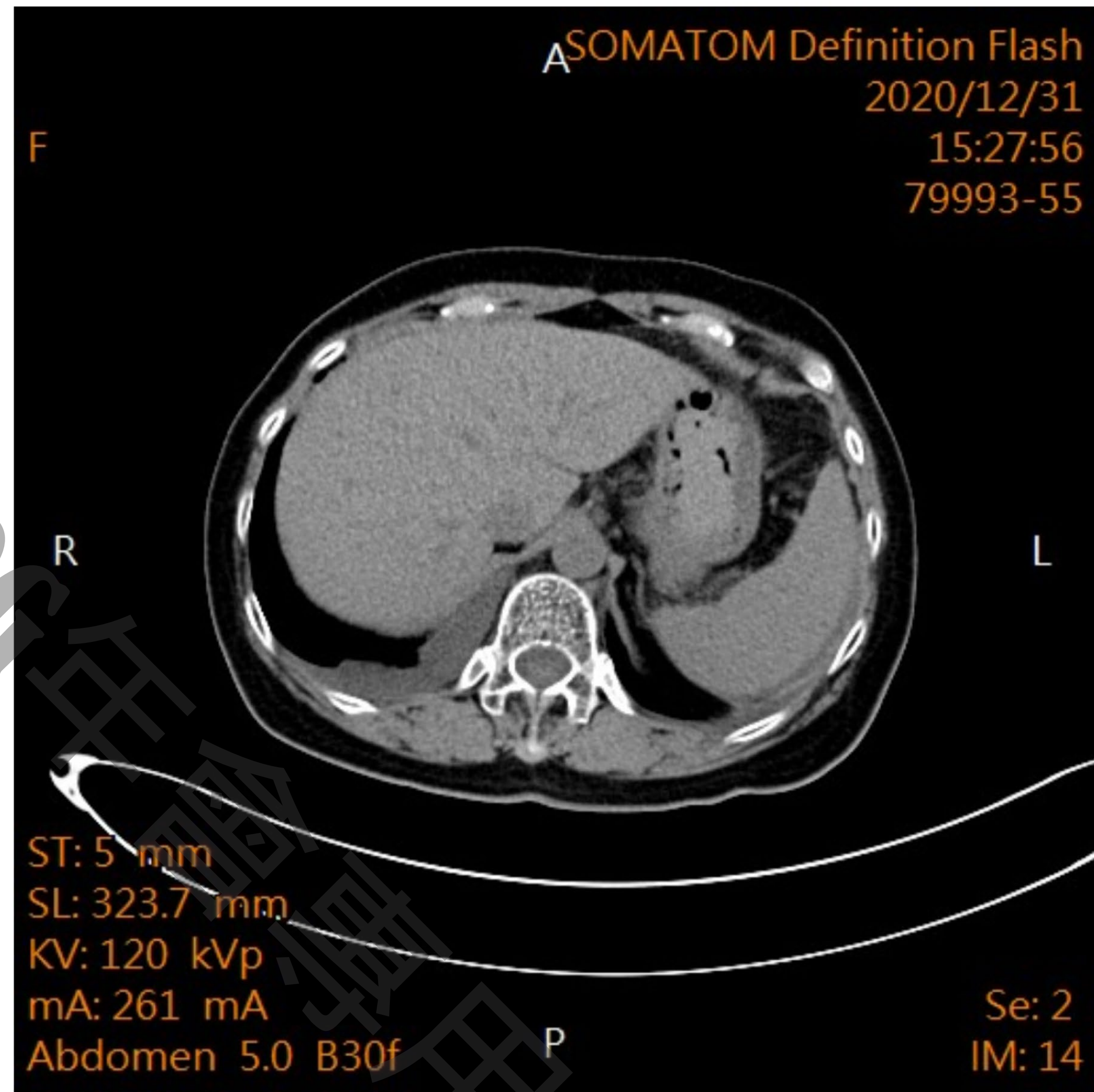
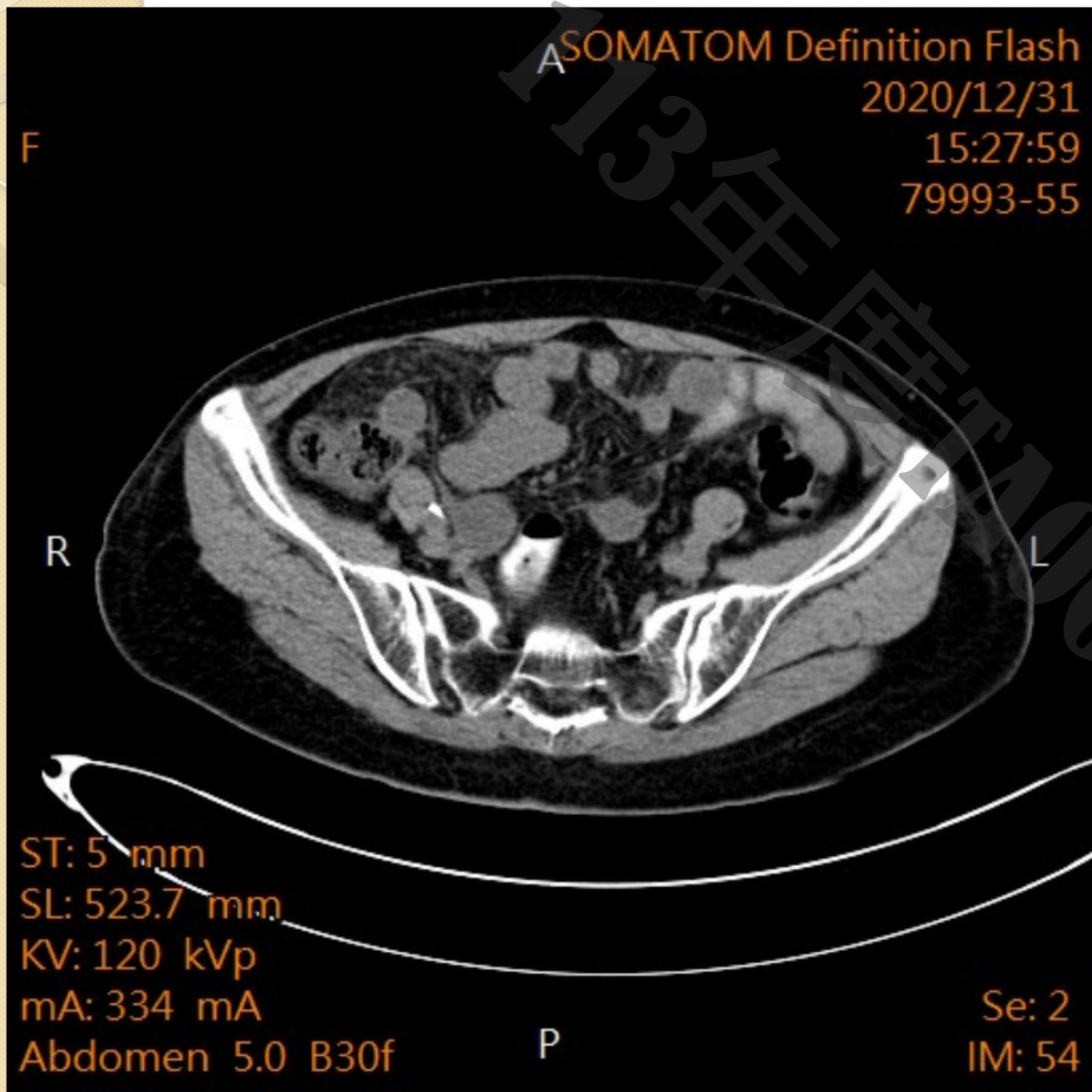


**Histopathological
Confirmation**

113年會展
個案分享

History

- ◆ **Left ovarian mucinous carcinoma** with squamous differentiation stage IA Gr 1 pT1AN0Mb s/p laparoscopic staging on 2014/4/10 (**58y/o**).
- ◆ Asymptomatic. **Elevated CA125** (42.2 U/mL) noted during follow-up (2020/12/09, **64y/o**).
- ◆ Official report of CT scan (2020/12/31)
 - ◆ Peritoneal thickening with ascites and dirty mesentery, suspicious for **peritoneal seedings**
 - ◆ Right pleural effusion



Treatment Plan

◆ Impression

- ◆ Recurrent ovarian cancer with peritoneal seedings

◆ Treatment options

◆ Option A

- ◆ Start platinum-based chemotherapy + bevacizumab

◆ Option B

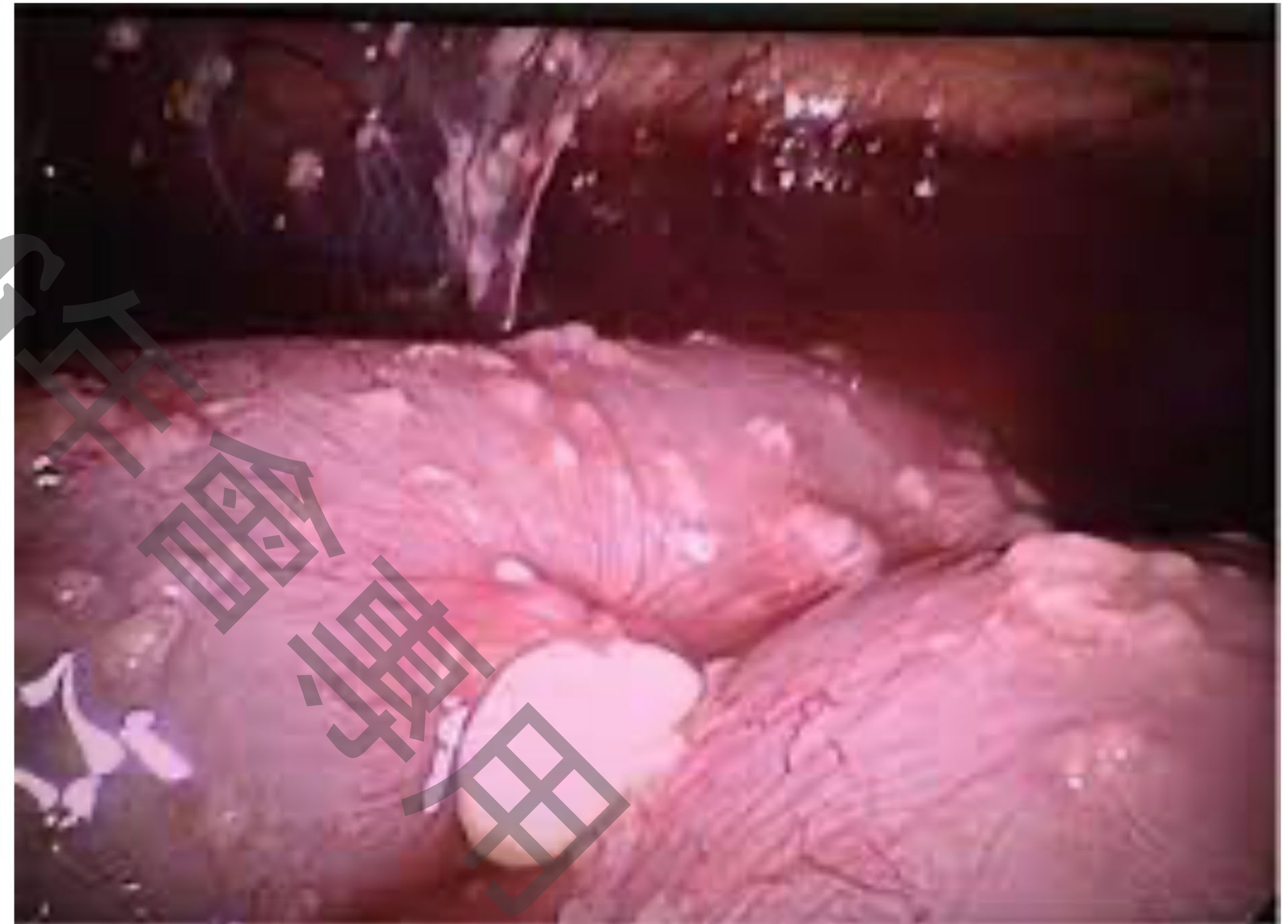
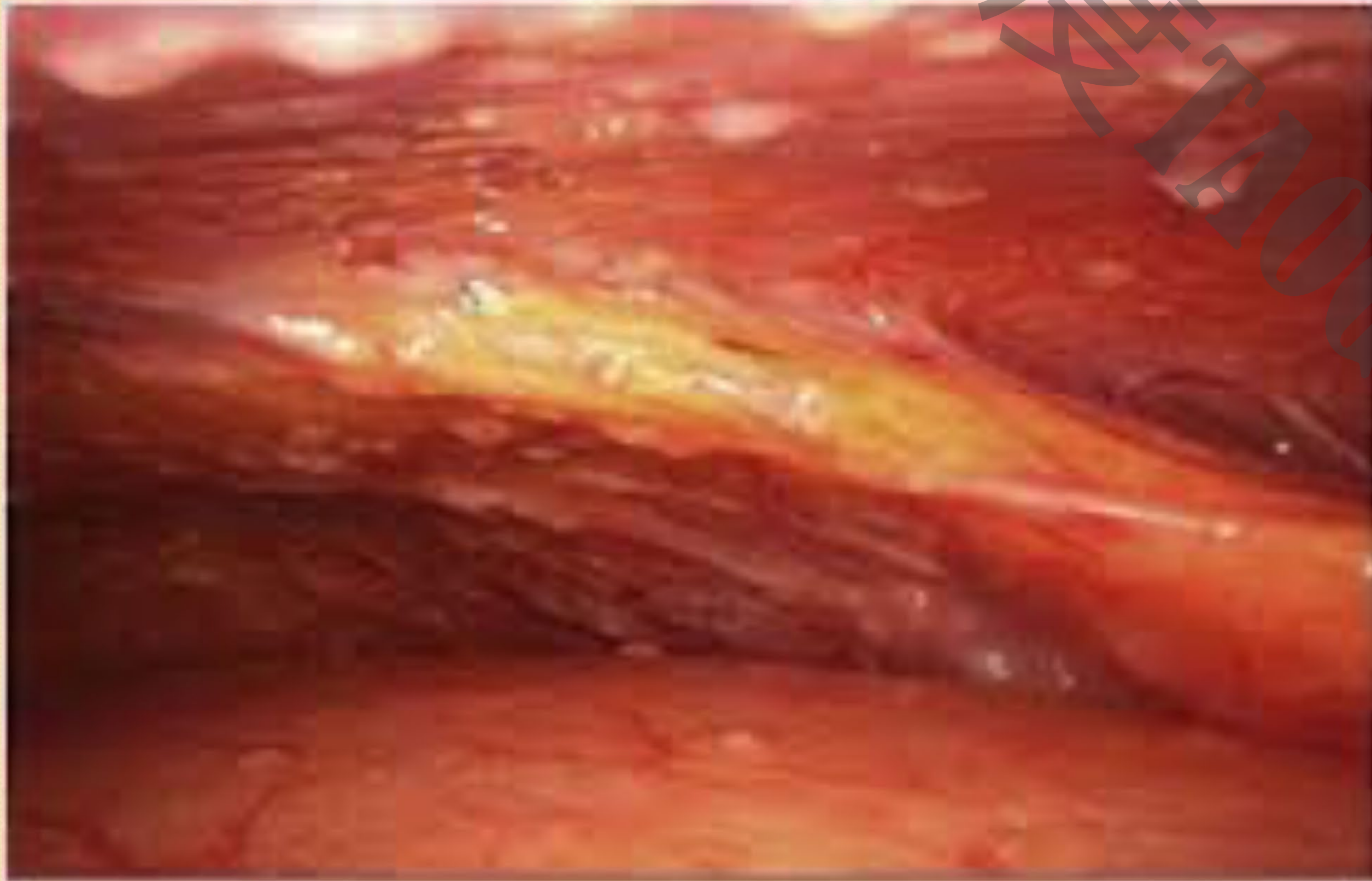
- ◆ Diagnostic laparoscopy first

- ◆ If operable => cytoreduction + HIPEC

- ◆ If inoperable => biopsy, followed by chemotherapy, etc

Operative Findings (網路截圖)

**Frozen section =>
granulomatous inflammation with central caseous necrosis**



Clinical Course

- ◆ TB confirmed by culture
- ◆ Rifampin+ isoniazide+ pyrazinamide+ ethambutol (2021 02/09~11/08)
- ◆ **No evidence of disease** (TB and ovarian cancer) at last F/U (2024 Feb)

原本可能枉死....

◆若沒先手術證實其病理報告，則將直接化學治療

==> 必定無效

==> 病況持續惡化，誤以為是 platinum-resistant

==> 將繼續改用其他化學治療、標靶治療

==> 必定仍無效

==> 癌症藥物抑制免疫功能，導致加速 TB 惡化

==> 終將死於TB，但將被誤認為死於卵巢癌復發

Take Home Messages:

For conditions mimicking GYN malignancies

- Histopathological confirmation is **the golden standard**
- **Avoid** over-treatment-related morbidity
 - Clinical assessment (MC cycle? Pregnancy? IUD hx? TB environment? ART? PID?
 - Supplementary tools (functional imaging such as PET/CT, DWI-MRI, etc; risk-stratification system such as O-RADS, etc)
- For **fertility-concerning** patients with suspicious adnexal lesions ==> first exclude the possibility of temporary physiologic changes

113年度IAOC青年會理事

Meigs' Syndrome

- **Triad:**
 - Ascites
 - Pleural effusion (right side)
 - Benign solid ovarian tumor
- **Resolve** after the resection of the tumor
- A diagnosis of **exclusion**

Pseudo-Meigs' ; Pseudo-pseudo-Meigs'

- **Pseudo-Meigs' syndrome**
 - Ascites
 - Pleural effusion
 - Pelvic tumor other than benign ovarian solid tumor
- **Pseudo-pseudo-Meigs' syndrome (Tjalma's syndrome)**
 - Ascites
 - Pleural effusion
 - Elevated CA125
 - SLE