

TERMAT, PERKUFIZIMET DHE MATJET PER TE PERSHKRUAR KARAKTERISTIKAT EKOGRAFIKE TE ENDOMETRIT DHE LEZIONEVE INTRAUTERINE

Konsensusi sipas grupit IETA
(International Endometrial Tumor Analysis)

IETA 1- ne grate me hemorragji uterine anormale

IETA 2- interobserver variability

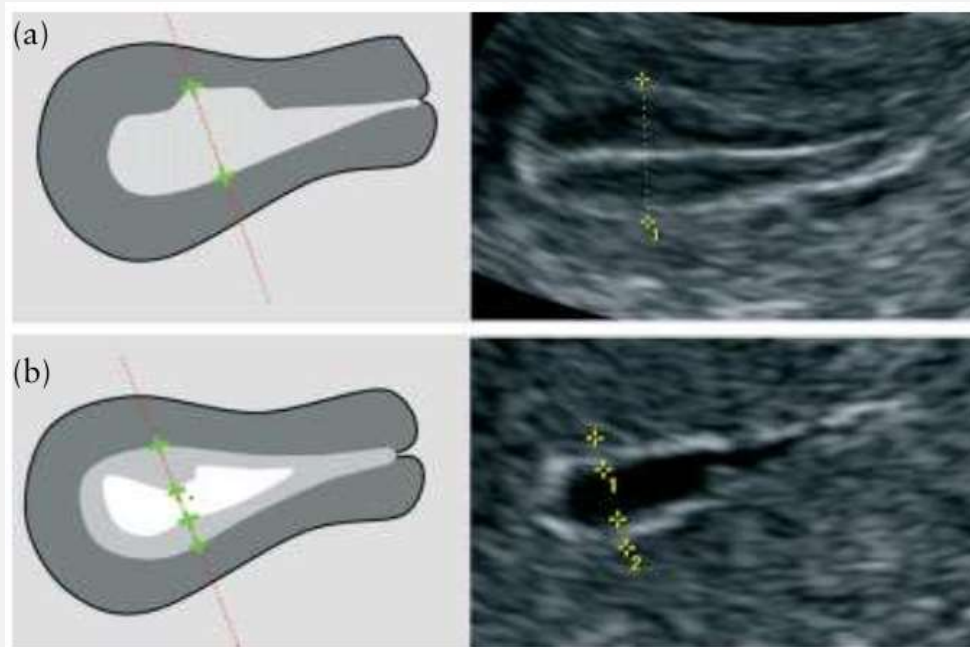
IETA 3- ne gra asimptomatike

IETA 4- ca endometri pre vs. postmenopauzike

TEKNIKA E EKZAMINIMIT

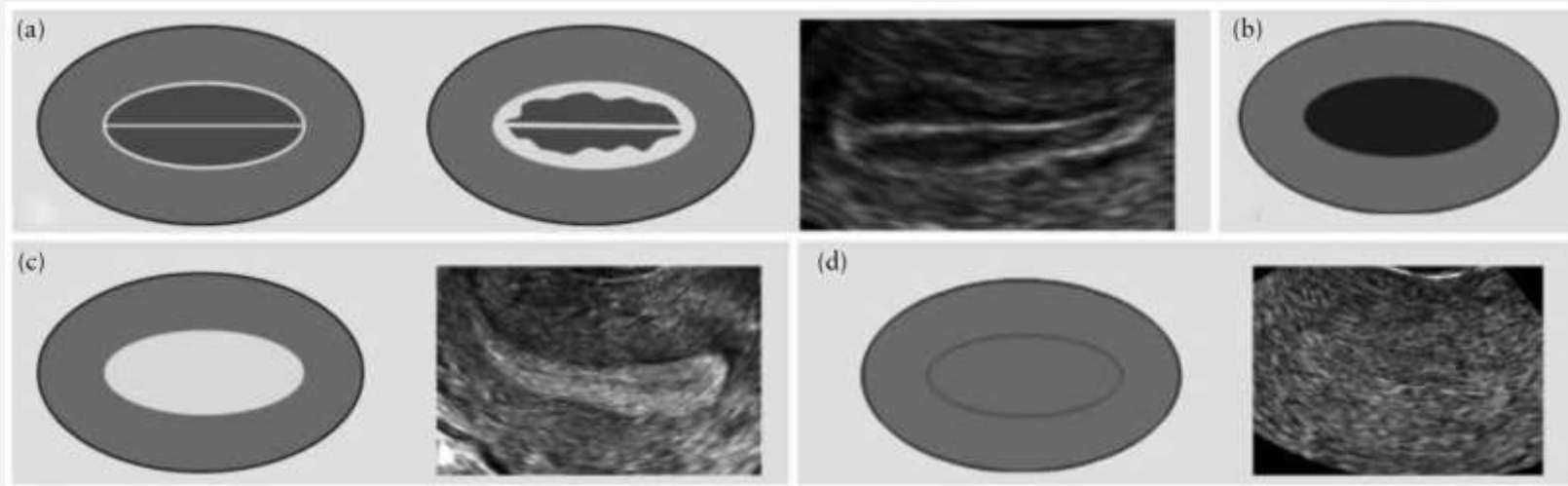
- Duhet te skanohet ne menyre transvaginale
- Skanimi transabdominal perdoret ne prezence te myomave te medha/uterus globoz.
- Premenopauzike: ne fazen proliferative te hershme (cikli 4-6)
- Postmenopauzike me terapi zevendersuese hormonale: 5-10 dite pas tb se fundit progestin.

VLERESIMI KUANTITATIV I TRASHESISE SE ENDOMETRIT



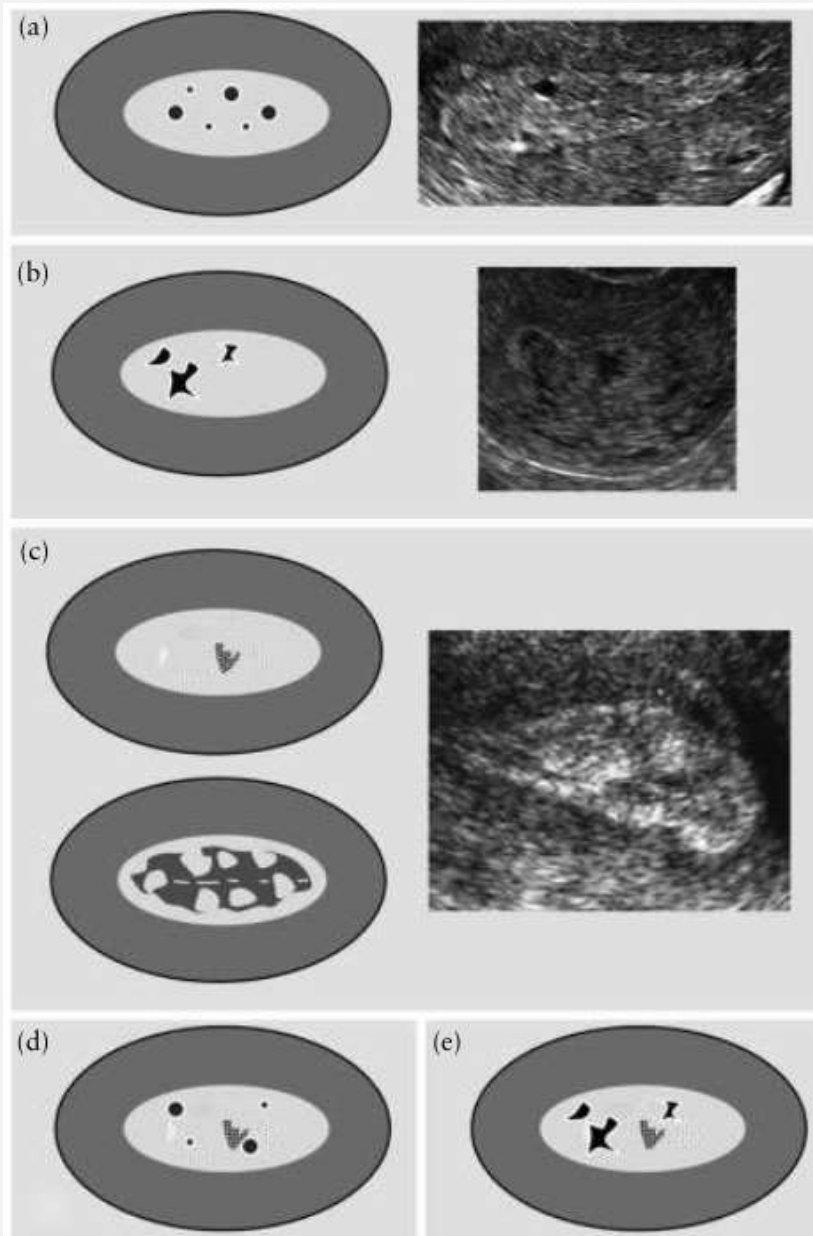
- a) Matja e trashesise se endometrit ne mungese te likidit intrakavitar; endometri duhet te matet ku eshte me l trashe
- b) Kur likidi intrakavitar eshte present, matet trashesia e te dy shtresave dhe behet mbledhja e tyre.

VLERESIMI KUALITATIV I ENDOMETRIT



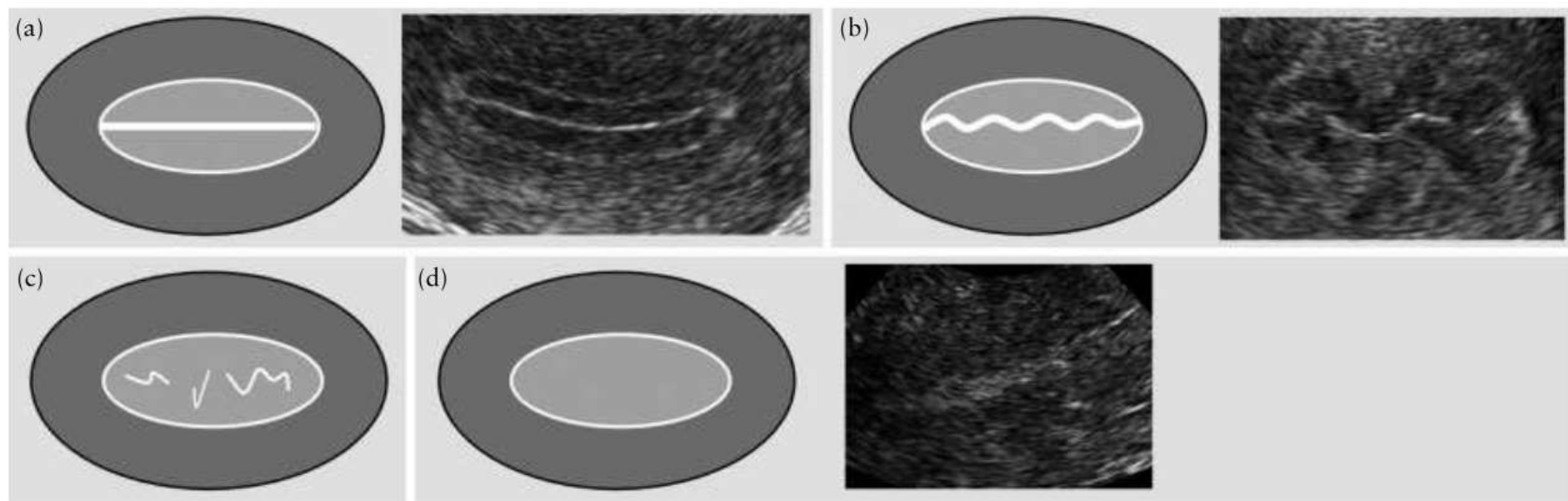
I. Ekogeniciteti endometrial “uniform”

- a) Paterni tre-shtresor
- b) Hipoekogen
- c) Hiperekogen
- d) Izoekogen



2. Ekogeniciteti endometrial “jo uniform”

- a) Sfond homogjen me zona kistike te rregullta
- b) Sfond homogjen me zona kistike te crregullta
- c) Sfond heterogjen pa zona kistike
- d) Sfond heterogjen me zona kistike te rregullta
- e) Sfond heterogjen me zona kistike te crregullta



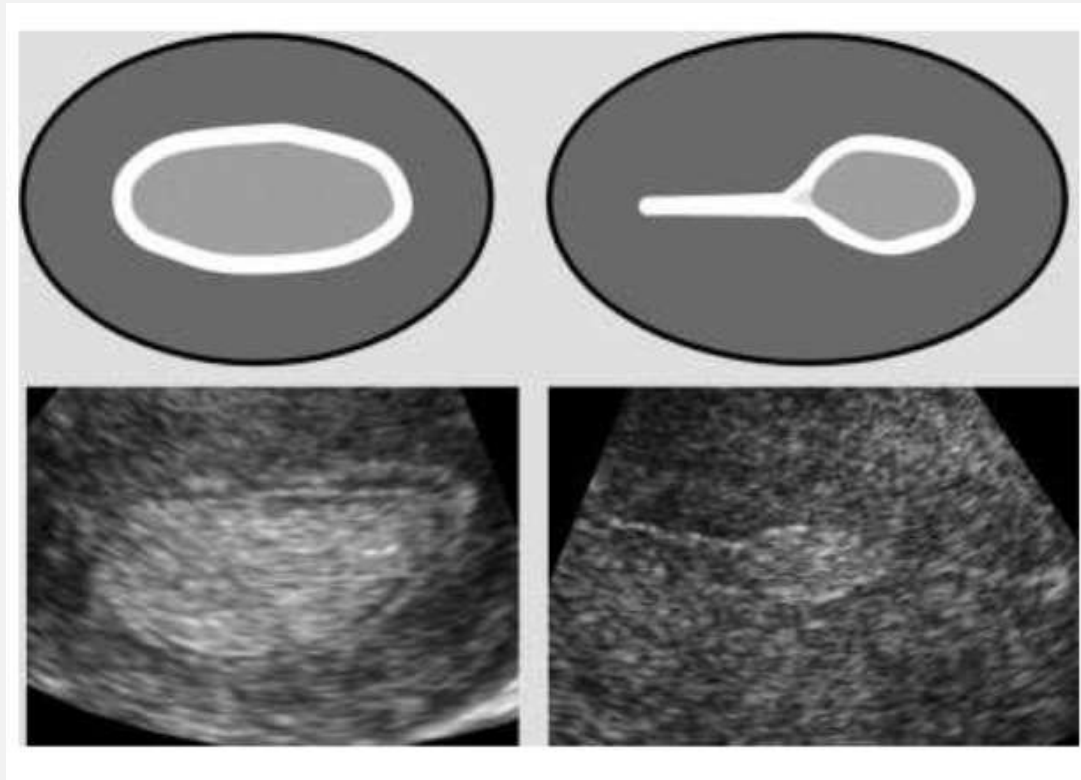
3. Midline endometrial

a) Linear

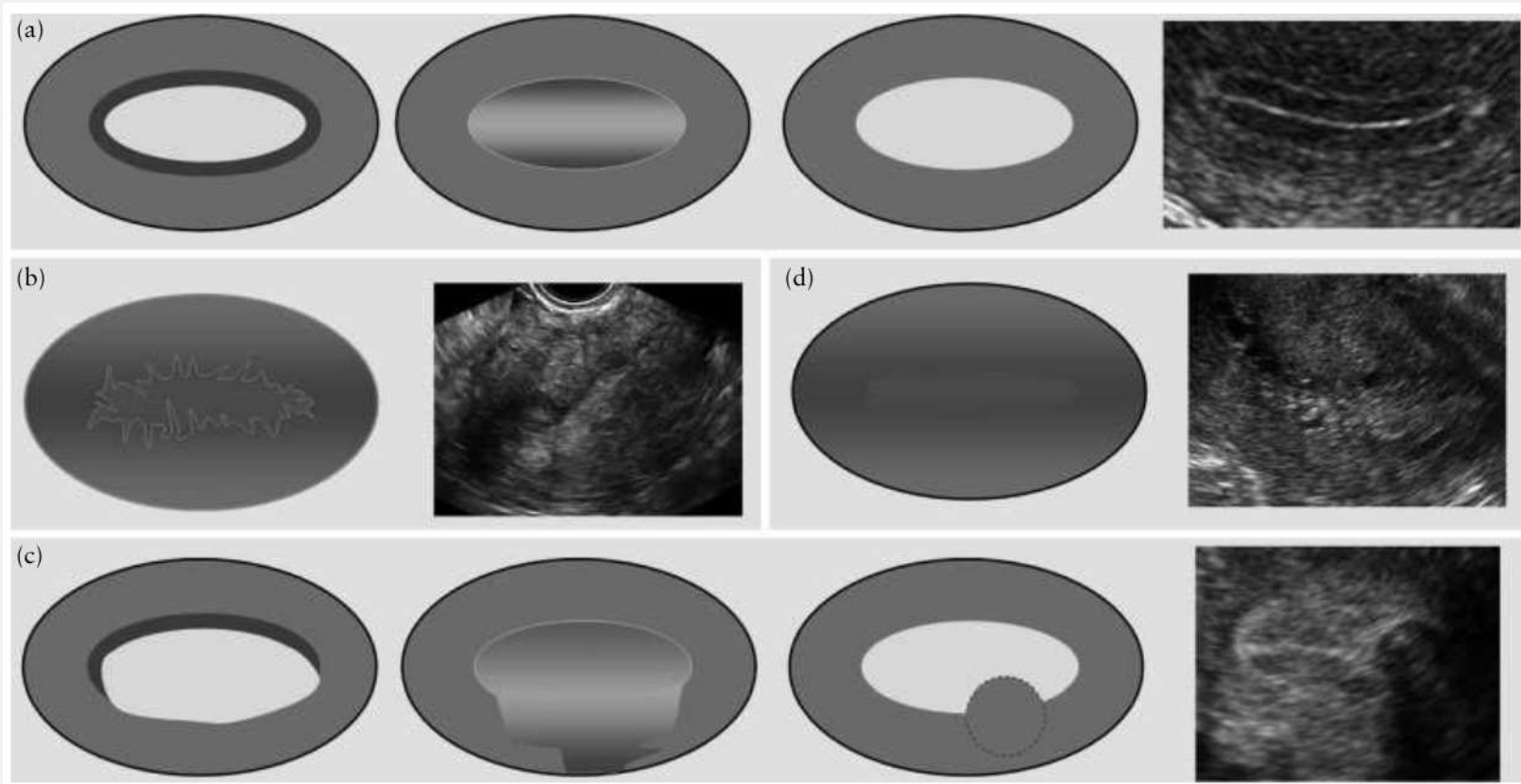
b) Jo linear

c) I crregullt

d) I padefinuar

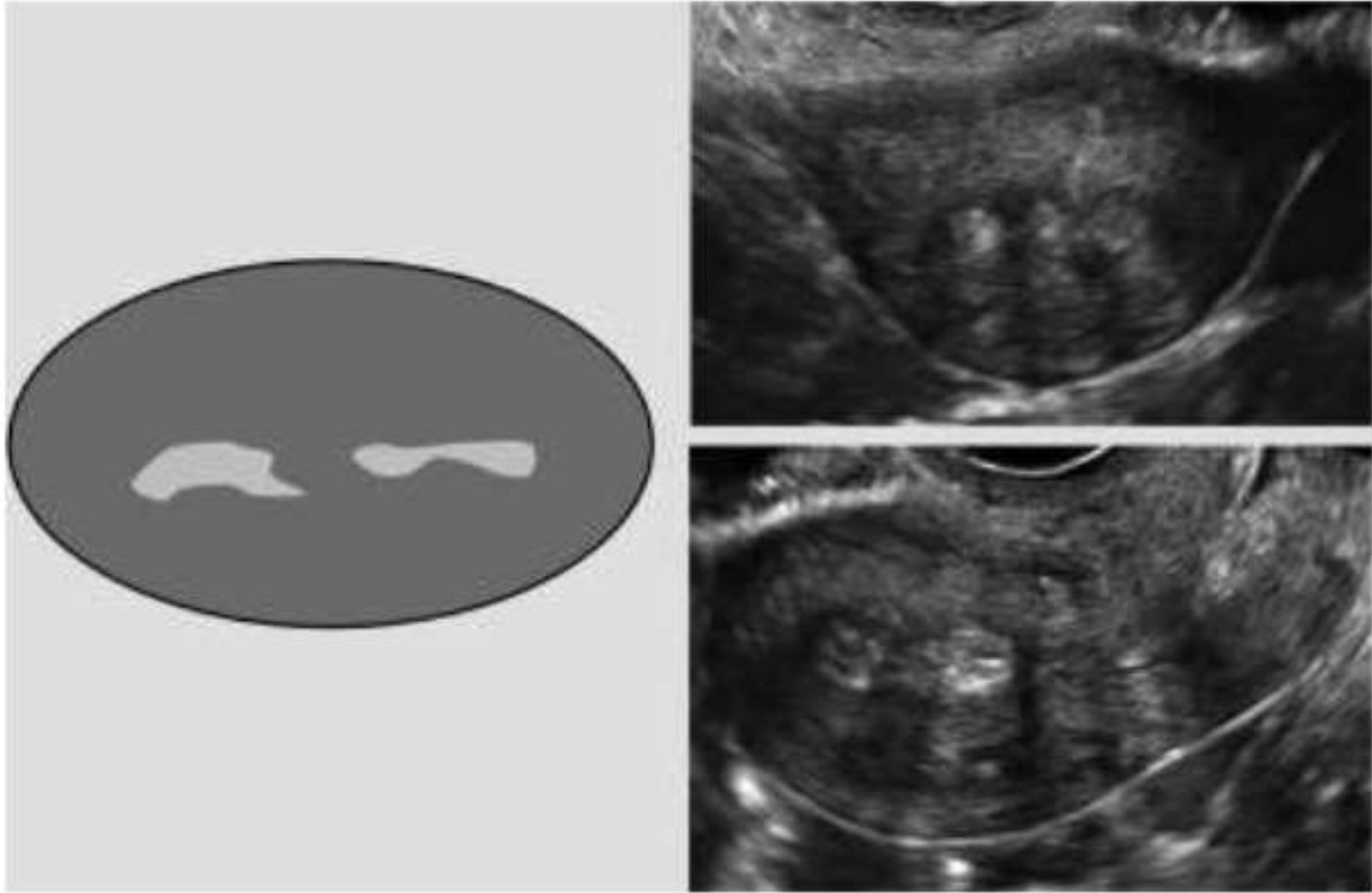


4. Bright edge- ekoja e formuar mes nje lezioni intrakavitar dhe endometrit.

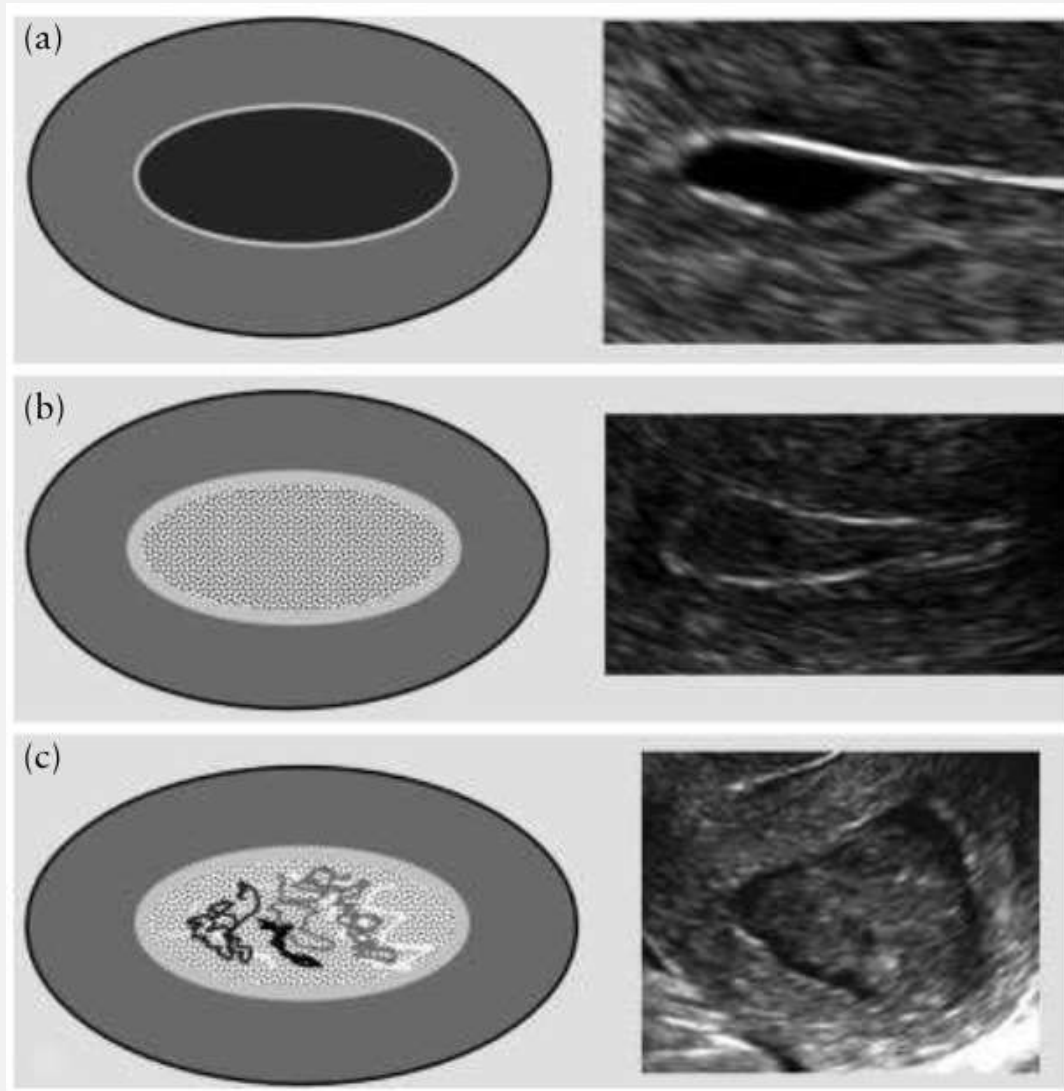


5. Junksioni endometrial-myometrial

- a) I rregullt
- b) I crregullt
- c) I nderprere
- d) I padefinuar



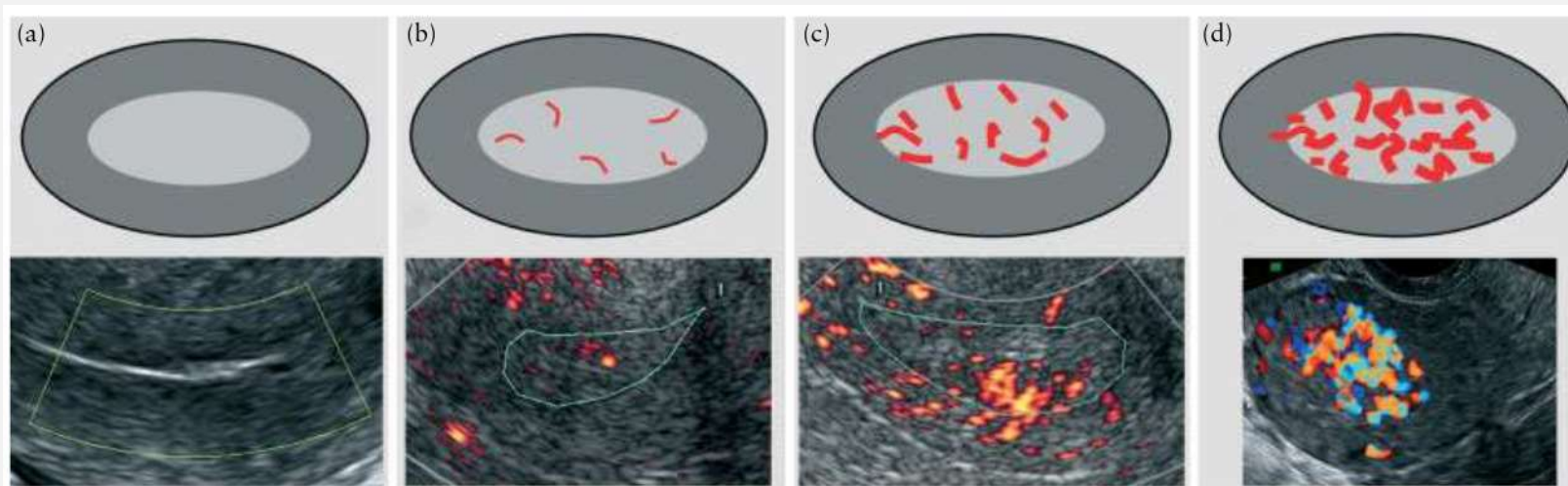
6. Sinekie- fije indi qe kryqezojne endometrin



7. Likidi intrakavitar

- a) Anekogen/ ekogenicitet I nivelit te ulet
- b) Pamje “ground-glass”
- c) Ekogenicitet miks

VLERESIMI ME COLOR/POWER DOPPLER

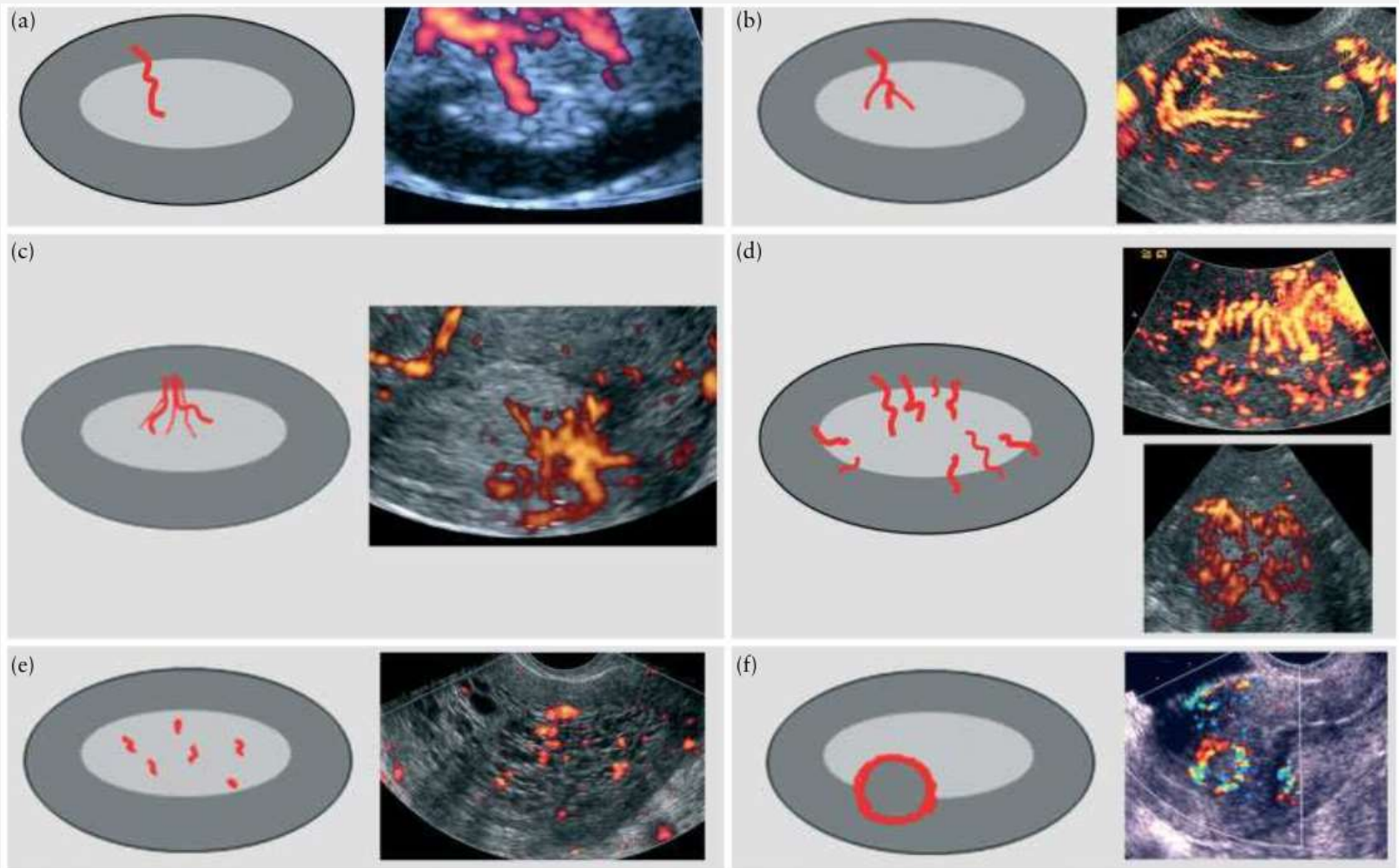


Vleresimi me Color Doppler I endometrit

- a) Pa qarkullim- vleresohet me 1 pike
- b) Qarkullim minimal- vleresohet me 2 pike
- c) Qarkullim I moderuar- vleresohet me 3 pike
- d) Qarkullim abundant- vleresim me 4 pike

Settings:

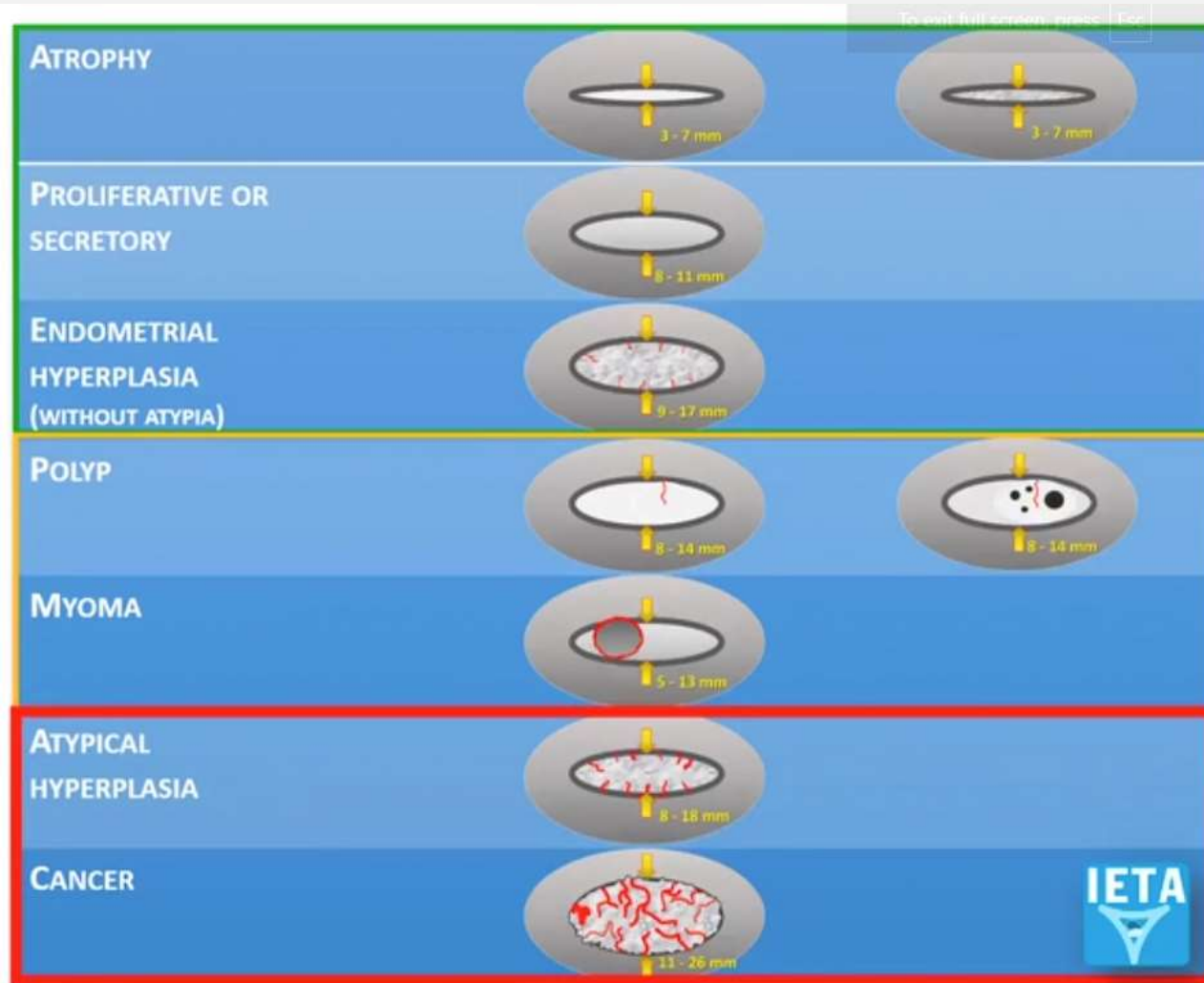
- Ultrasound frequency 5.0 MHz
- Pulse repetition frequency 0.3-0.9 kHz
- Wall filter 30-50Hz
- Color power Doppler gain should be reduced until all color artifacts disappear



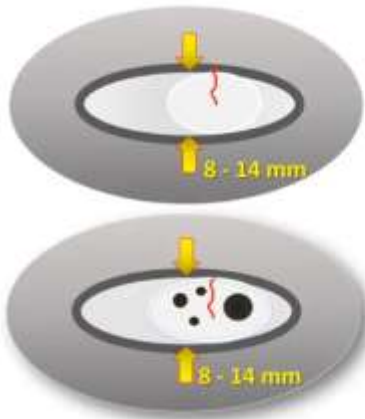
Struktura vaskulare:

- a) Vaze dominante pa degezim
- b) Vaze dominante me degezim
- c) Vaza multiple me origjine fokale
- d) Vaza multiple me origjine multifokale ne junksjonin myometrial-endometrial
- e) Vaza te shperndara
- f) Qarkullim cirkular

SHEMBUJ TE PATOLOGJIVE ENDOMETRIALE



Polyp

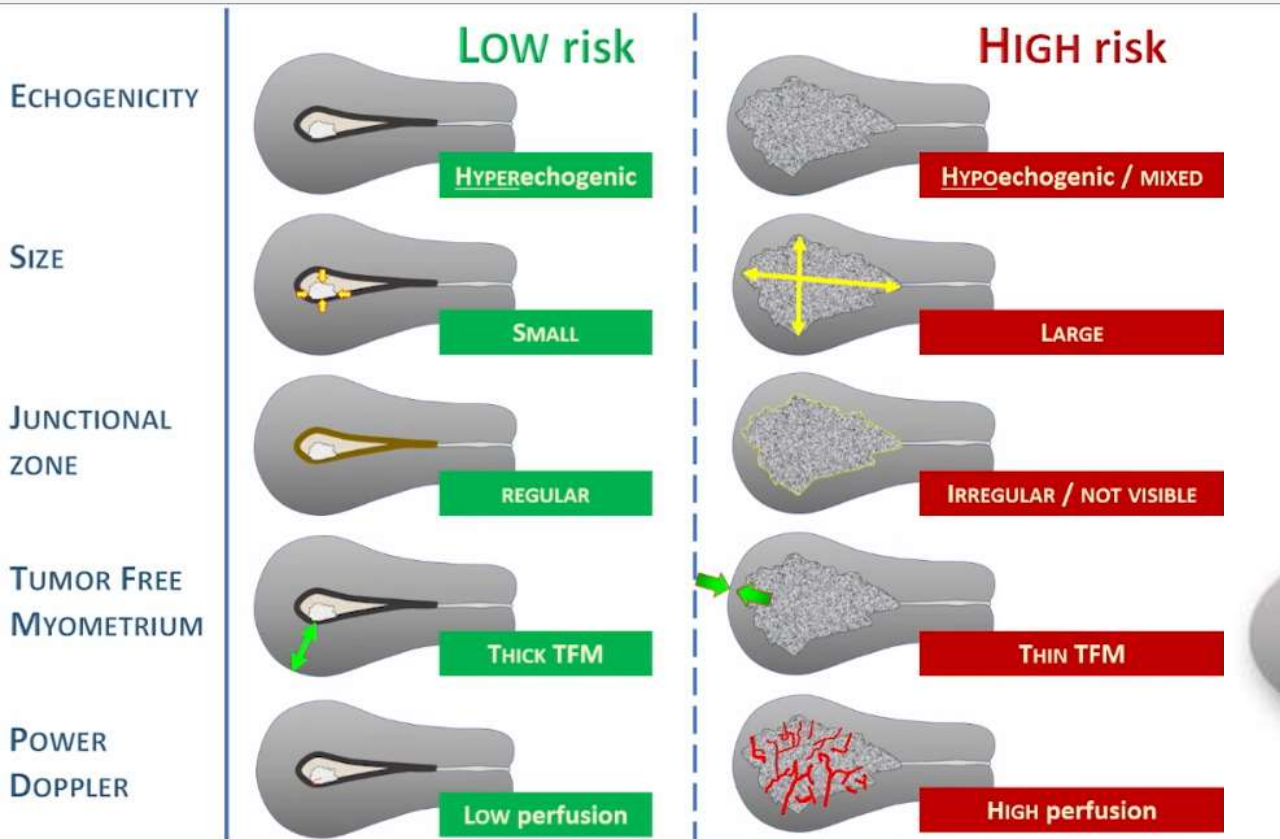


Endometrial polyp	n/N	%	95% CI
Endometrial thickness 8–14 mm	373/694	54	50–57))
Uniform hyperechogenic	188/704	27	23–30))
Non-uniform heterogeneous echogenicity without cysts	182/704	26	23–29))
Non-uniform echogenicity with regular cysts	153/704	22	19–25))
Bright edge	338/704	48	44–52))
Undefined midline	446/694	64	61–68))
Regular endometrial–myometrial junction	542/704	77	74–80))
Single vessel with or without branching*	345/500	69	65–73))
Color score 2 or 3	483/704	69	65–72))

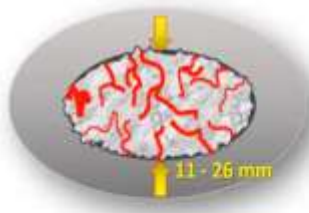
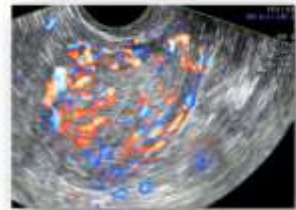
Endometrial polyp		PRE-menopausal	POST-menopausal
		%	%
Endometrial thickness 8–14 mm	373/694 (54 (50–57))	246/417 (59 (54–64))	127/277 (46 (40–52))
Uniform hyperechogenic	188/704 (27 (23–30))	122/420 (29 (25–33))	66/284 (23 (18–28))
Non-uniform heterogeneous echogenicity without cysts	182/704 (26 (23–29))	118/420 (28 (24–32))	64/284 (23 (18–27))
Non-uniform echogenicity with regular cysts	153/704 (22 (19–25))	32/420 (8 (5–10))	121/284 (43 (37–48))
Bright edge	338/704 (48 (44–52))	232/420 (55 (50–60))	106/284 (37 (32–43))
Undefined midline	446/694 (64 (61–68))	205/417 (49 (44–54))	241/277 (87 (83–91))
Regular endometrial–myometrial junction	542/704 (77 (74–80))	348/420 (83 (79–86))	194/284 (68 (63–74))
Single vessel with or without branching*	345/500 (69 (65–73))	246/326 (75 (71–80))	99/174 (57 (50–64))
Color score 2 or 3	483/704 (69 (65–72))	314/420 (75 (71–79))	169/284 (60 (54–65))



RISK I ULET VS. I LARTE PER SEMUNDJE MALINJE



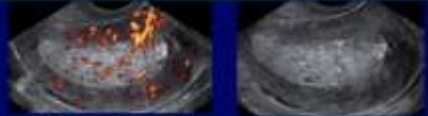
Endometrial cancer




Endometrial cancer	n/N	%	95% CI
Endometrial thickness 11-26 mm	55/110	50	(41-59)
Non-uniform heterogeneous echogenicity without cysts or irregular cysts	81/111	73	(65-81)
Undefined midline	99/110	90	(84-96)
Interrupted endometrial-myometrial junction	47/111	42	(33-52)
Multiple vessels of focal or multifocal origin*	74/98	76	(67-84)
Color score 3-4	72/111	65	(56-74)

Sonomorphology in Low vs. High-risk cancer

	LOW-RISK		HIGH RISK		High vs. Low risk		
	Stage 1A Grade 1-2	Stage 1A, Grade 3 non-endometroid	Stage ≥1B Grade 1-2	Stage ≥1B, Grade 3 non-endometroid	Diff.	C-stat	Chi2
Endometrial thickness, mm	13	15	22	28	9%	0.72	p<0.001
Endometrial Morphology IETA							
Regular EM junction	35%	21%	13%	7%	-23%	0.61	p<0.001
Non-uniform echogenicity	57%	61%	67%	71%	7%	0.55	p<0.001
Color score 3-4	50%	58%	74%	83%	22%	0.66	p<0.001
Multiple, multifocal vessels	29%	25%	55%	59%	21%	0.64	p<0.001



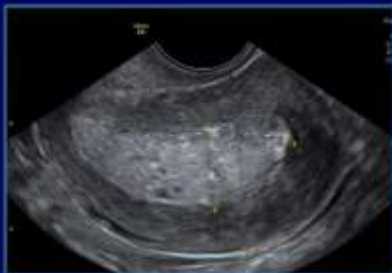
LOW RISK



HIGH RISK

Two most common echogenicity patterns

Uniform
Hyperechoic (28%)



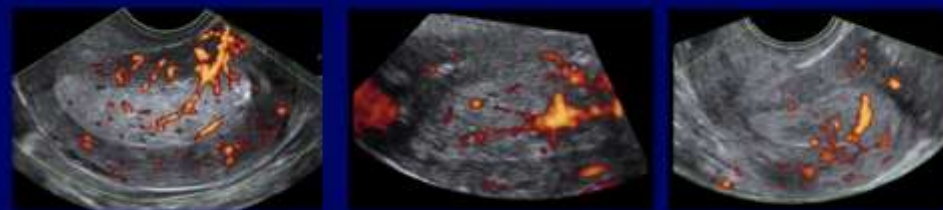
Low-risk tumors (36%)
High risk tumors (20%)

Non-uniform
Heterogeneous (48%)

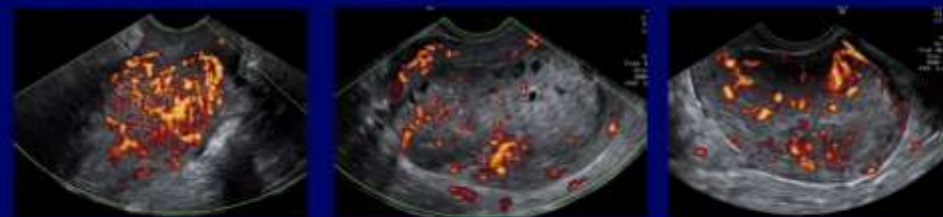


Low-risk tumors (45%)
High risk tumors (52%)

Typical examples



LOW RISK CANCER

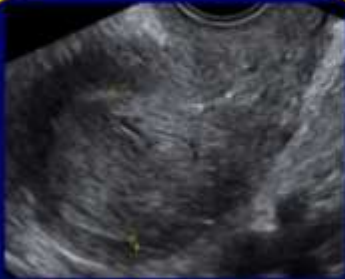


HIGH RISK CANCER



Sonographic features of non-endometrioid tumors

	Clear cell carcinoma (n=30)	Carcinoma sarcoma (n=37)	Serous carcinoma (n=88)	Mixed cell carcinoma (n=31)
Endometrial thickness, mm	28	39	18	20
<u>Endometrial Morphology IETA</u>				
Regular EM junction (%)	23%	14%	15%	7%
Non-uniform echogenicity (%)	63%	68%	53%	77%
Color score 3-4 (%)	77%	81%	65%	74%
Multiple vessels, multifocal (%)	33%	54%	46%	39%



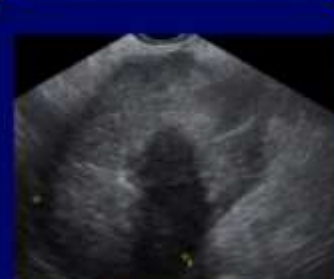
Clearcell



Carcinosarcoma

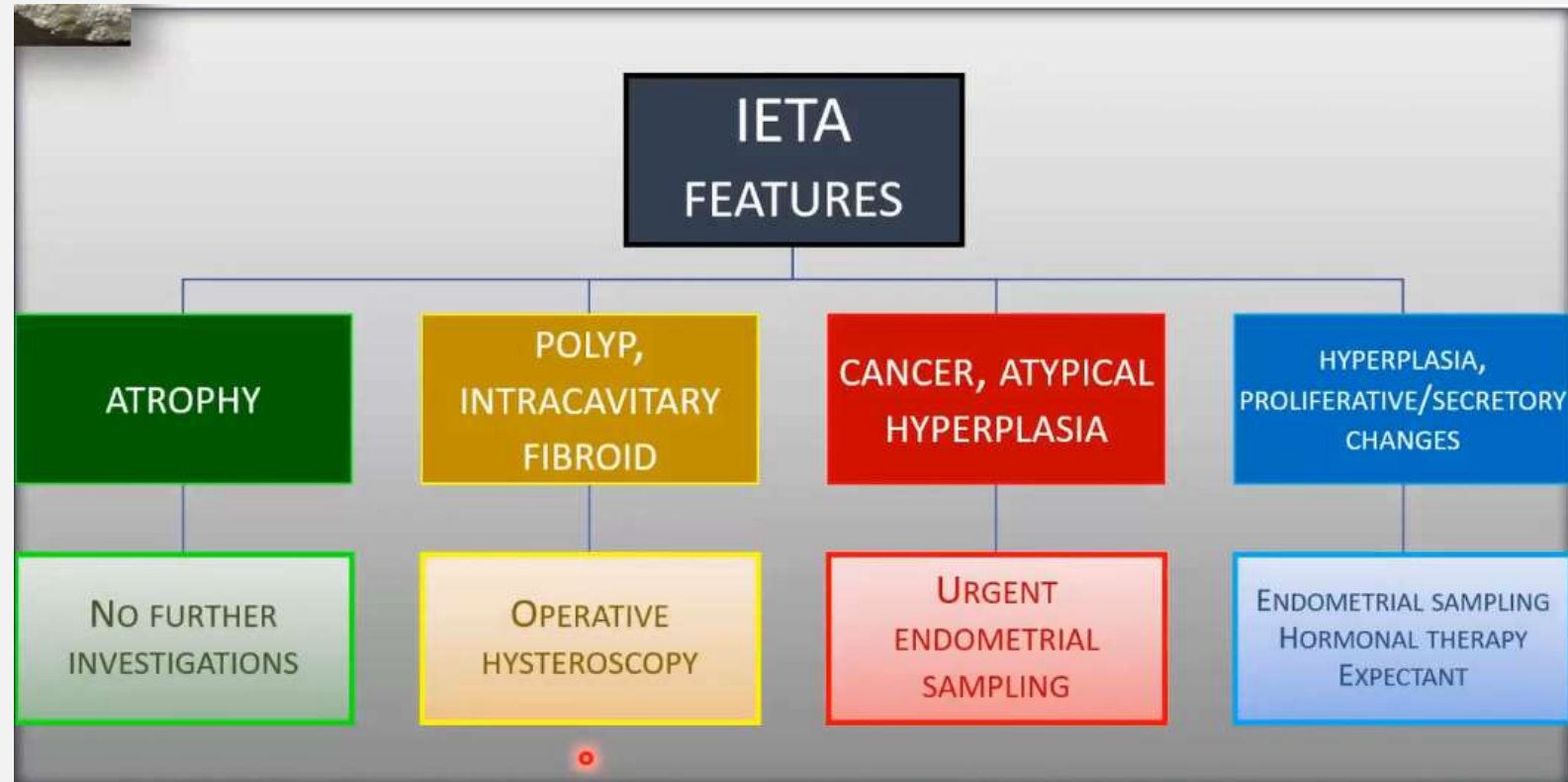


Serous



Mixed

RENDESIA KLINIKE



KONKLUZIONET

- Karakteristikat ekografike te kancerit endometrial ndryshojne me rritjen e grades dhe stadit
- Tumoret me risk te larte jane me te medhenj, kane me shpesh ekogenicitet jo uniform, kane junkcion EM te crregullt, pikezim te larte CD dhe vaza multifokale.
- Tumoret jo endometriode jane te medhenj, te mirevaskularizuar dhe te crregullt; karcinomat seroze ngjajne me tumoret endometroide te grades 1-2.
- Sipas IETA-4: grate premenopauzike kane risk te ulet per semundje, por pikezimi CD dhe paterni vascular jane karakteristika jo te besueshme
Vleresimi ekografik I invazionit miometral eshte me I sakte ne grate premenopauzike.