ACR® American College of Radiology
Quality is Our Image

O-RADS™ Ultrasound v2022 Lexicon Categories, Terms, and Definitions
Revised: January 2023

Term	Sub-term	Definition	Comments
Major Categories of Imaging Findings			
Physiologic (consistent with normal physiology)			
Follicle		Simple cyst (unilocular, anechoic, smooth) ≤ 3 cm in premenopausal group	
Corpus Luteum (CL)		Thick-walled cyst **typically** ≤ 3 cm, ± crenulated inner walls, ± internal echoes, with peripheral flow in premenopausal group	- May be solid-appearing (no visible central fluid) with peripheral flow - No internal flow
Lesion (not physiologic)			
Unilocular cyst	Without solid component(s)	Cystic lesion with a single locule (no complete septa)	- ± internal echoes, incomplete septa, wall irregularity < 3 mm in height - **Simple cyst:** anechoic and smooth inner walls - **Non-simple cyst:** smooth inner walls and internal echoes or incomplete septa
	With solid component(s)	As above and includes solid tissue ≥ 3 mm in height	
Bilocular cyst	Without solid component(s)	Cystic lesion with 2 locules (single complete septation)	± internal echoes, incomplete septa, or wall/septal irregularity (< 3 mm height)
	With solid component(s)	As above and includes solid tissue ≥ 3 mm in height	
Multilocular cyst	Without solid component(s)	Cystic lesion with ≥ 3 locules (≥ 2 complete septations)	± internal echoes, incomplete septa, or wall/septal irregularity (< 3 mm in height)
	With solid component(s)	As above and includes solid tissue ≥ 3 mm in height	
Solid (≥ 80%)		Lesion with at least 80% solid tissue (based on echogenicity and echotexture)	- ± internal vascularity - May use term **solid-appearing** if no internal vascularity
Size			
Maximum diameter		Largest diameter regardless of the plane in which it is obtained	Used for risk stratification
Average linear dimension		(Maximum length + height + width)/3	Used to assess interval change
Solid or Solid-Appearing Lesions			
External Contour			
Smooth		Uniform/even outer margin	
Irregular		Non-uniform/uneven outer margin	Includes lobulated
		Posterior Acoustic Features	
Shadowing		**Broad or diffuse** hypoechogenicity posterior to a lesion due to sound attenuation	- Associated with calcifications and fibromatous lesions - Relevant for solid smooth - **Differs from refractive artifact** due to differences in attenuation by adjacent tissues, typically seen as linear shadowing from within or at edge of a lesion

Cystic Lesions			
Inner Walls or Septations			
Smooth		Uniform/even inner margin or septation	
Irregular		Non-uniform/uneven inner margin or septation	Focal wall or septal thickening < 3 mm in height
Calcifications		High-level echogenicity within wall associated with posterior shadowing	Risk assessment based upon smooth or irregular margin
Internal Content			
Hemorrhagic cyst descriptors	Unilocular, no internal vascularity		May have peripheral flow in wall or surrounding ovarian tissue
	Reticular pattern	Fine, thin, intersecting lines	Represents fibrin strands, not septations
	Retractile clot	Avascular component with echogenicity higher than adjacent fluid and angular, straight, or concave margins	
Dermoid cyst descriptors	≤ 3 locules, no internal vascularity		May have flow in walls or intervening septa
	Hyperechoic component (diffuse or regional) with shadowing	Focal hyperechoic component within cystic fluid, or completely hyperechoic lesion, with posterior acoustic shadowing	Represents fat, cartilage, bone
	Hyperechoic lines and dots	Bright, linear, and punctate echoes within cystic component	Represents coiled hair
	Floating echogenic spherical structures	Non-dependent, hyperechoic, round structures within cyst fluid ± posterior acoustic shadowing	Highly characteristic, albeit uncommon
Endometrioma descriptors	≤ 3 locules, no internal vascularity		May have flow in walls or intervening septa
	Homogeneous low-level internal echoes	Homogeneous and evenly dispersed echoes throughout entire cyst	Ground glass echoes = synonym
	Peripheral punctate echogenic foci	Punctate echogenic foci in cyst wall which typically do not shadow, however may demonstrate twinkling artifact	- Highly characteristic albeit uncommon - Represents hemosiderin byproducts
Septations	Complete	Linear tissue within cyst cavity extending from wall to wall in all planes	
	Incomplete	Linear tissue within cyst cavity not extending from wall to wall in all planes	
Solid or Solid-Appearing Component			
Solid component		Focal wall thickening or solid tissue arising from cyst wall/septation that protrudes into cyst cavity ≥ 3 mm in height	- Excludes blood products and dermoid cyst contents - May use term **solid-appearing** if no internal vascularity
Papillary projection		As above and surrounded by fluid on 3 sides	Number important for risk stratification (< 4 vs. ≥ 4)
Vascularity			
Color Score (CS)		Numeric overall subjective assessment of lesion vascularity on color or power Doppler CS 1 = No flow CS 2 = Minimal flow CS 3 = Moderate flow CS 4 = Very strong flow	- Applies to some cystic and all solid smooth lesions - Does not include flow in surrounding ovarian parenchyma
Peripheral flow		Circumferential flow on color or power Doppler	Typical pattern with corpus luteum and hemorrhagic cyst
General and Extra-Ovarian Findings			
Cysts	Paraovarian cyst	Simple cyst separate from the adjacent ovary	- Includes paratubal cyst - Moves independent of ovary with transducer pressure

	Peritoneal inclusion cyst	Fluid collection with ovary at margin or suspended within that conforms to adjacent pelvic organs	- ± septations representing adhesions - Associated with prior surgery or inflammatory processes
Hydrosalpinx	Anechoic, fluid-filled tubular structure	Fluid-distended fallopian tube without internal echoes that has an elongated tubular shape	
	Incomplete septation(s)	Internal linear tissue that does not extend from wall to wall in all planes	Represents folds; may be better appreciated on cine clips
	Endosalpingeal folds	Short round projections around inner walls of fluid-filled tube often equidistantly spaced	Represents internal tubal infoldings seen in short axis
Peritoneal Fluid	Physiologic	Confined to pouch of Douglas and below uterine fundus when anteverted/anteflexed or between uterus and urinary bladder when retroverted/retroflexed	Considered non-pathologic
	Ascites	Fluid extends beyond pouch of Douglas or cul-de-sac and above uterine fundus when anteverted/anteflexed, and anterior/superior to uterus when retroverted/retroflexed	± internal echoes; more suspicious for malignancy if echoes present
Peritoneal nodules		Nodularity or focal thickening of the peritoneal lining or along the serosal surface of bowel	Associated with peritoneal carcinomatosis