



O-RADS MR Lexicon Categories, Terms and Definitions

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Category	Term	Sub-term	Definition	Comments
1	Major categories			
1a	Physiological observations (consistent with normal physiology)			
	Follicle		Simple cyst \leq 3 cm in premenopausal age group. A follicle is hyperintense on T2WI, hypointense on T1WI and does not enhance on post-contrast T1WI.	Pre-menopausal women only
	Corpus luteum		Cyst \leq 3 cm, with an enhancing crenulated wall on subtracted post-contrast T1WI, +/- blood clot or hemorrhagic contents.	Pre-menopausal women only
1b	Lesions (not physiologic)			
	Cystic lesion	Unilocular cyst	Single locule, with or without solid tissue.	
		Multilocular cyst	More than one locule, with or without solid tissue.	
	Lesion with solid component	Solid tissue	Conforms to one the following morphologies and enhances: papillary formations, mural nodules, irregular cyst wall/septations and solid portion.	
		Other solid components, not considered solid tissue	Smooth wall/septation, clot/debris, fat	Not considered solid tissue
	Solid lesion		Consists of at least 80% solid tissue with <20% of lesion volume being cystic.	
2	Size			
	Maximum diameter		Largest diameter of the lesion and/or solid component in any imaging plane.	
3	Shape or contour of solid lesion or solid tissue			
3a	Smooth		Regular or even margin of a solid lesion or solid tissue.	
3b	Irregular		Uneven margin of a solid lesion or solid tissue.	
4	Signal Intensity			
4a	Homogeneous		Uniform appearance of the signal observed in an adnexal finding.	
	Heterogeneous		Non-uniform or variable appearance of the signal observed in an adnexal finding.	
4b	T2 hypointense		Adnexal observation with signal intensity lower or equal to iliopsoas muscle.	
	T2 intermediate		Adnexal observation with signal intensity higher than iliopsoas and lower than CSF.	
	T2 hyperintense		Adnexal observation with signal intensity equal or higher to CSF.	
4c	T1 hypointense		Adnexal observation with signal intensity that follows simple fluid.	
	T1 intermediate		Adnexal observation with signal intensity similar or higher to iliopsoas and lower than fat.	

	T1 hyperintense		Adnexal observation with signal intensity equal or higher to fat.	
4d	DWI High B-value Low signal		Adnexal lesion with signal similar to urine or cerebral spinal fluid.	
	DWI High B-value High signal		Adnexal lesion with signal clearly higher than urine or CSF.	
5	Lesion Components			
5a	Cystic Fluid Descriptors			
	Simple fluid		Fluid content that follows CSF or urine on all sequences: hyperintense on T2WI and hypointense on T1WI.	
	Non-simple fluid	Hemorrhagic fluid	Content can be variable depending on age.	Late subacute hemorrhage is hyperintense on T2WI and hyperintense on T1WI.
		Endometriotic fluid	Content is hypointense on T2WI and hyperintense on T1WI.	
		Proteinaceous fluid	Content is variable in signal on T2WI (and variably hypointense on T1WI).	
		Fat or lipid containing fluid	Hyperintense on T2WI and hyperintense on T1WI, and loses signal on fat saturated images.	If there is microscopic fat, there will be signal loss on out-of-phase images and there may not be any signal loss on fat saturated images.
	Additional specific descriptors for non-simple fluid	Fluid-fluid level	Appearance where the non-dependent fluid component has a different signal intensity from the dependent fluid component with horizontal delineation.	
		Shading	Cyst fluid that is hypointense on T2WI; the extent of hypointense T2 signal intensity may be homogeneous, variable within the cyst or graduated and dependent.	
5b	Solid Component Descriptors			
	Solid tissue: Enhances and conforms to one of the listed morphologies			
	Solid tissue descriptors	Papillary projection	Enhancing solid component arising from the inner/outer wall or septation of an adnexal lesion, with a branching architecture.	
		Mural nodule	Enhancing solid component, measuring ≥ 3 mm, arising from the wall or septation of an adnexal lesion, with nodular appearance.	
		Irregular septation	Enhancing linear strand that runs from one internal surface of the cyst to the contralateral side demonstrating an uneven margin.	
		Irregular wall	Enhancing cyst wall demonstrating an uneven margin.	
		Larger solid portion	Enhancing component of an adnexal lesion that does not fit into the categories of papillary projection, mural nodule, or irregular septation/wall.	
	Other solid components, not considered solid tissue			
		Smooth septations/wall	Even contour or margin with no irregularities, mural nodules or papillary projections.	

		Blood clot, non-enhancing debris and fibrin strands	Solid-appearing material within a cyst that does not enhance.	
		Fat	Lipid-containing material that does not enhance.	
		Hair, calcification and a Rokitansky nodule	Other components of a dermoid not considered solid tissue.	
6	Enhancement: T1WI post-contrast			
6a	Dynamic contrast enhancement with time intensity curves			
	Low risk curve		Enhancement of the solid tissue within the adnexal lesion with minimal and gradual increase in signal over time with no well-defined shoulder and no plateau.	
	Intermediate risk curve		Enhancement of the solid tissue within the adnexal lesion with an initial slope less than the myometrium, moderate increase in signal intensity with a plateau.	
	High risk curve		Enhancement of the solid tissue within the adnexal lesion with an initial slope greater than the myometrium, marked increase in signal intensity with a plateau.	
6b	Non-dynamic contrast enhancement at 30-40 seconds post-injection			
	Less than or equal to the myometrium		Enhancement of the solid tissue within the adnexal lesion is equal to or hypoenhancing to the outer myometrium at 30-40 seconds post-contrast injection.	
	Greater than the myometrium		Enhancement of the solid tissue within the adnexal lesions is greater than the outer myometrium at 30-40 seconds post-contrast injection.	
7	General and Extra-Ovarian Findings			
7a	Peritoneal fluid	Physiologic	Small amount of fluid inside the pouch of Douglas or cul-de-sac or between the uterus and bladder.	
		Ascites	Fluid outside the pouch of Douglas or cul-de-sac or fluid extending beyond the space between the uterus and bladder.	
7b	Fallopian tube descriptors	Tubular	Substantially longer in one dimension than in the two perpendicular dimensions.	
		Endosalpingeal folds	Incomplete septations or short round projections, orthogonal to the length of the tube.	
7c	Peritoneal inclusion cyst		Cyst following contour of adjacent pelvic organs; or normal ovary at the edge of/ or surrounded by a cystic mass.	
7d	Ovarian torsion	Twisted pedicle	Swirling appearance of the broad ligament or ovarian pedicle.	
		Massive ovarian edema	Enlarged ovary with edematous central stroma.	
		Ovarian infarction	Lack of enhancement of the ovary on T1WI post-contrast.	
7e	Peritoneal thickening, nodules	Thickening, smooth	Uniform thickening, without focal nodularity.	
		Thickening, irregularity	Nonuniform thickening or focal areas of nodularity.	