

	新指針による分類		現在の病理診断	関連する臨床診断
Maternal vascular malperfusion (MVM)		母体血管灌流障害		
肉眼所見	① placental hypoplasia	胎盤低形成	小さい胎盤	FGR・HDP
	② infarction	梗塞	梗塞	HDP・IUFD・FGR・血栓性疾患
	③ retroplacental hematoma	胎盤後血腫	常位胎盤早期剥離	常位胎盤早期剥離
病理診断	④ distal villous hypoplasia		絨毛低形成：細く小さい絨毛	FGR
	⑤ accelerated villous maturation	絨毛過成熟	虚血絨毛・過熟絨毛など	HDP・FGR・胎盤機能不全
	⑥ decidual vasculopathy	脱落膜血管障害	アテロシス・血栓など	HDP・抗リン脂質抗体症候群・
	⑦ others	その他		
Fetal vascular malperfusion (FVM)		胎児血管灌流障害	胎児血流の閉塞 血栓症・臍帯～絨毛の血管閉塞	HDP・凝固異常・血栓性疾患・IUFD・CAM・FGR・臍帯付着部異常
	① avascular villi	無血管絨毛	無血管絨毛	HDP・TTTS
	② thrombosis	血栓（動脈・静脈）	血栓症・臍帯～絨毛の血管閉塞	IUFD・FGR・HDP・胎児機能不全
	③ villous stromal-vascular karyorrhexis		hemorrhagic endovasculitis (HEV)	IUFD・胎児機能不全
	④ fibrinoid deposition	フィブリン沈着		IUFD・FGR・HDP・習慣性流産・抗リン脂質抗体症候群
	⑤ intramural fibrin deposition	血管壁のフィブリン沈着	臍帯～絨毛内血栓	IUFD・FGR・胎児機能不全
	⑥ Stem vessel obliteration	幹絨毛の血管閉塞	fibrovascular sclerosis/ stem vessel endovasculopathy	IUFD・胎児機能不全
	⑦ Vascular Ectasia	幹絨毛血管の拡張		
Delayed villous maturation		絨毛発育遅延	未熟絨毛	胎児染色体異常・DM・HDP・胎盤/胎児機能不全
Ascending Intrauterine Infection		上行性子宮内感染		
	① maternal inflammatory response	母体炎症反応	絨毛膜下羊膜炎～壊死性絨毛膜羊膜炎	CAM・早期産・胎盤/胎児機能不全 新生児仮死
	② fetal inflammatory response	胎児炎症反応	臍帯炎・絨毛膜板血管炎	臍帯炎 胎児機能不全 新生児仮死
Villitis of unknown etiology (VUE)		意義不明慢性絨毛炎	意義不明絨毛炎（ウイルス感染によらない慢性絨毛炎）	IUFD・FGR・胎盤/胎児機能不全

Placental classification (incorporating the 2014 Amsterdam Placental Workshop Group criteria)

1. Placental vascular processes
 - a. Maternal stromal-vascular lesions
 - Developmental
 - Superficial implantation/decidual arteriopathy
 - Increased immature extravillous trophoblast
 - Malperfusion
 - Global/partial
 - Early: distal villous hypoplasia
 - Late: accelerated villous maturation
 - Segmental/complete
 - Villous infarct(s)
 - Loss of integrity
 - Abruptio placenta (arterial)
 - Marginal abruption (venous)
 - Acute
 - Chronic
 - b. Fetal stromal-vascular lesions
 - Developmental
 - Villous capillary lesions
 - Delayed villous maturation (maturation defect)
 - Dysmorphic villi
 - Malperfusion
 - Global/partial
 - Obstructive lesions of umbilical cord
 - Recent intramural fibrin in large fetoplacental vessels
 - Small foci of avascular or karyorhectic villi
 - Segmental/complete
 - Chorionic plate or stem villous thrombi
 - Large foci of avascular or karyorhectic villi
 - Loss of integrity
 - Large vessel rupture (fetal hemorrhage)
 - Small vessel rupture (fetomaternal hemorrhage)
 - Villous edema
2. Placental inflammatory-immune processes
 - a. Infectious inflammatory lesions
 - Acute
 - Maternal inflammatory response: chorioamnionitis, subchorionitis
 - Fetal inflammatory response: chorionic/umbilical vasculitis
 - Chronic
 - Villitis (CMV, others)
 - Intervillositis (malaria, others)
 - b. Immune/idiopathic inflammatory lesions
 - Villitis of unknown etiology and related/associated lesions
 - Chronic villitis
 - Chronic chorioamnionitis
 - Lymphoplasmacytic deciduitis
 - Eosinophil T-cell fetal vasculitis
 - Chronic histiocytic intervillositis
3. Other placental processes
 - Massive perivillous fibrin(oid) deposition (maternal floor infarction)
 - Abnormal placental shape or umbilical insertion site
 - Morbidly adherent placentas (accreta)
 - Meconium-associated changes
 - Increased circulating nucleated red blood cells

CMV, cytomegalovirus.

Redline. Classification of placental lesions. Am J Obstet Gynecol 2015.