

**Supplementary Table S1** : Summary of the placental lesions in reported cases of SARS-CoV-2 infection in the literature [3-6, 8-10, 12-17, 20-22, 25-46].

*Abbreviations : AI acute inflammation, CA chorioamniotitis, CCA chronic chorioamniotitis, CI chronic inflammation, CHI chronic histiocytic intervillitis, CS cesarean section, DIC disseminated intravascular coagulation, ECMO extracorporeal membrane oxygenation, FVM fetal vascular malperfusion, WG gestational week, IUFD intra uterine fetal death, IVT intervillous thrombosis, EFD excess fibrin deposition, MVM maternal vascular malperfusion, RDS respiratory distress syndrome.*

Study	Meta analysis	number of cases	clinical data	Placental weight	histological data
Girolamo 2021	yes, 57 studies	895 (with complete histopathological analysis of the placenta)			30,7% MVM, 26,9% FVM, 32,7% EFD, 22,6% AI, 26,2% CI, 17,5% normal, 14,5% IVT
Wong 2021	yes, 29 studies (20 not described in Girolamo study)	328			37,8% MVM, 9,2% FVM, 43,2% EFD, 34,7% inflammation, 29,4% intervillitis, 14,7% villitis, 35,3% CA, 35,1% infarction, 5,4% thrombosis
Sharp 2020	yes, 50 studies (14 neither described in Girolamo or Wong studies)	150			46% MVM, 35,3% FVM, 8,7% villitis, 5,3% intervillitis, 6% CA, 30% EFD

Bouachba 2021	no	5	27,6 WG (average), 3 stillbirth, 2 extreme premature births at 26 WG	< 10th percentile for all	CHI for all, EFD for all, IVT for 4/5
Giordano 2021	no	5	38,8 WG (average), good extra uterine adaptation for all	2 cases <10th percentile	3/5 FVM, 3/5 IVT, 2/5 villitis, 1/5 CA
Babal 2021	no	1	38 WG ; fetal death, maternal Covid-19 infection 22 days before	Normal weight	Intervillous EFD, villitis, infarction, villous necrosis, description of intervillitis
Favre 2021	no	2	29 and 32 WG ; diminution of fetal movements, maternal Covid-19 infection 5 days before, CS, severe brain injury	Normal weight	EFD 80%, extensive and focal chronic intervillitis, infarction
Mao 2021	no	1	20 WG ; fetal death, maternal Covid-19 infection 2 days before	< 10th percentile	EFD and chronic intervillitis at 80%
Moresi 2021	no	106	39,1 WG ; maternal Covid-19 infection at 37,1 WG (average) ; 8,5% of neonatal care	19,2th percentile (average)	MVM, 43,3% extensive fibrin deposition, 7,5% chronic intervillitis

Celik 2021	no	20	2 groups : low / asymptomatic, mild / severe maternal symptoms		57% histological anomalies in mild symptoms, 100% in severe symptoms ; 4 cases of perivillous fibrin, 3 cases of intervillitis, 1 case of intervillitis with deciduitis (with CMV infection)
Briana 2021	no	40, 18 with histological data	39 WG (average)		MVM, decidual arteriopathy, various degree of intervillous maternal thrombosis, fibrinoid deposition, mild intervillitis, lymphoplasmocytic deciduitis
Rosner 2021	no	1	27 WG ; severe RDS, ECMO, CS		MVM, chorangioma (1 cm), CCA
Thomas 2021	no	197	1 miscarriage, 1 fetal death, 1 neonatal death		1,02% intervillitis
Dumont	no	1	29 WG ; diminution of fetal movements, CS		Placentitis triad = intervillous fibrin deposition, ischemic necrosis of villi, histiocytic intervillitis

Laresgoiti 2021	no	66	2 miscarriages, 2 fetaldeath	19,44th mean percentile	90,91% of placental fibrinoid
Meyer 2021	no	61	5 IUFD	25% small weight for gestational age	77% with almost one sign of MVM, 59% perivillous EFD
Brien 2021	no	66		15 cases < 10th percentile	80% with histological anomalies ; 20 cases with MVM, 18 cases of FVM, 32 with excess fibrin
Marinho 2021	no	1	34 WG, fetal death	80th percentile	acute and chronic intervillitis, intervillous microabscesses, chronic and proliferative villitis, acute deciduitis, severe MVM with extensive and diffuse intervillous / pervillous fibrin deposition, acute FVM
Mai 2021	no	1	Morbid obesity		FVM

Husen 2021	no	39	30,6% premature birth		62% with almost one histologic anomaly ; 4 cases with "SARS-Cov-2 placental signature" = CHI, EFD, syncytiotrophoblast necrosis, CD20+ ; 9 cases with perivillous fibrin
Schwartz 2021	no	1	31 WG, DIC, CS	Normal weight	CHI, with neutrophils, EFD on 30% of the placenta
Jin 2021	no	2	38 and 39 WG		Acute necrotizing deciduitis, intervillous EFD, acute intervillitis
Watkins 2021	no	7	1 miscarriage		All with placentitis = CHI, perivillous fibrin deposition, trophoblast necrosis ; 3 cases with FVM
Biringer 2021	no	1	Sudden preterm fetal death		Inflammation with fetal inflammatory response syndrome
Mourad 2021	no	66	59 cases with asymptomatic / mild maternal symptoms, 7 with severe maternal disease		MVM, FVM, acute and chronic inflammation

Popescu 2021	no	1	25 WG, fetal death with hydrops, 7 weeks after maternal recovery from a mild SARS-CoV-2 infection	> 90th percentile	Fetal systemic thrombosis, acute subchorionitis, FVM, intervillous thrombi, perivillous EFD, intervillitis with neutrophils and monocytes
Roberts 2021	no	1	Preterm birth	small for gestational age	Extensive intervillous histiocytosis, syncytiotrophoblast karyorrhexis, diffuse intervillous EFD
Argueta 2021	no	54	2 IUFD, 1 premature birth		31% FVM, 19% MVM, 7% both FVM and MVM, CHI in trophoblast virus context
Marton 2021	no	1	diminution of fetal movements at 25 WG, then death		CHI, trophoblast necrosis, EFD on 90% of the placenta
Resta 2021	no	1	gemellar gestation, 30 WG, perinatal death of one fetus after few minutes	Normal weight	On both sides, large EFD, CHI

Jang 2021	no	7	14,5 WG (mean) for Covid diagnosis, 38,4 WG (mean) for delivery		1 case with MVM with EFD, 4 cases of FVM, 2 cases with inflammation
Garrido 2021	no	198, with 9 cases Covid-positive			for the 9 cases, villous trophoblast necrosis, intervillous space collapse, mixed intervillous inflammatory infiltrate, EFD
JR He 2021	no	1	37 WG ; Covid infection at 7 WG	Normal weight	Placental insufficiency not linked to Covid
Baral 2021	no	1	IUFD		Widespread villous infarction, decidual arteriopathy with thrombosis and chorioamnionitis
Zhang 2021	no	101			no increase of placental pathology features
Zaigham 2021	no	1	34 WG, diminution of fetal movements and abdominal pain, CS, fetal death		EFD, acute intervillitis, degeneration of villous trophoblast layer on 50% of the placenta

Poisson 2021	no	1	35 WG, IUFD, covid infection at 32 WG		Acute chorionitis, 75% diffuse infarction, villous necrosis, extensive FVM
Dubucs 2022	no	50	1-3 weeks after positive test		10 with trophoblast necrosis, fibrinous deposits, intervillitis and extensive hemorrhagic changes, comprising 5 cases with IUFD