



Topic	Item	Checklist item description	Reported on Line
Title	1	The diagnosis or intervention of primary focus followed by the words "case report"	<u>Impact of SARS-CoV-2 on fetal malformation during pregnancy: A case report of fetal autopsy</u>
Key Words	2 2 to 5 key words that identify diagnoses or interventions in this case report, including "case report"	<u>SARS-CoV-2, Pregnancy, fetal malformation, autopsy</u>
Abstract (no references)	3a	Introduction: What is unique about this case and what does it add to the scientific literature?	<u>Little is known about the impact of SARS-CoV-2 on fetal anomalies.</u>
	3b	Main symptoms and/or important clinical findings	<u>We described a case report of fetal anomalies during second-trimester (25+3 weeks) pregnancy. The fetal autopsy was found with abnormal heart anatomy (including ventricular septal defect, oval hole valve missing, and pericardial effusion), polycystic kidney, and acute chorioamnionitis.</u>
	3c The main diagnoses, therapeutic interventions, and outcomes	<u>In this case report, fetus was found with abnormal heart structure and bilateral renal cystic changes at 25 + 3 weeks of gestation.</u>
	3d	Conclusion—What is the main "take-away" lesson(s) from this case?	<u>SARS-CoV-2 infection in second-trimester pregnancy not the direct factor resulted in congenital defects, and multiple risk factors contribute to these changes.</u>
Introduction	4	One or two paragraphs summarizing why this case is unique (may include references)	<u>There is limited data about COVID-19 and congenital defects.</u>
Patient Information	5a	De-identified patient specific information	_____
	5b	Primary concerns and symptoms of the patient	<u>A 36 years old pregnant woman (gravida 2, para 1) diagnosed with COVID-19 at 16 + 1 weeks of pregnancy.</u>
	5c	Medical, family, and psycho-social history including relevant genetic information	<u>She had no history of adverse pregnancy outcomes, history of consanguinity, family history of congenital defects or adverse drug intake, and had regular antenatal care since conception.</u>
	5d	Relevant past interventions with outcomes	_____
Clinical Findings		Outcomes	
Timeline			
Diagnostic Assessment			
Therapeutic Intervention			
Follow-up and			

6	Describe significant physical examination (PE) and important clinical findings	testing (such as PE, laboratory testing, imaging, surveys) <u>Four-dimensional color doppler ultrasound examination.</u>	- _____
		8b Diagnostic challenges (such as access to testing, financial, or cultural)	- _____
		8c Diagnosis (including other diagnoses considered)	<u>Fetal malformations.</u>
		8d Prognosis (such as staging in oncology) where applicable <u>Induction of labor was done with rivanol and delivered a stillbirth.</u>	<u>Induction of labor</u>
7	Historical and current information from this episode of care organized as a timeline	9a Types of therapeutic intervention (such as pharmacologic; surgical; preventive; self-care) <u>Induction of labor with rivanol.</u>	<u>Induction of labor</u>
		9b Administration of therapeutic intervention (such as dosage, strength, duration)	- _____
		9c Changes in therapeutic intervention (with rationale)	- _____
		10a Clinician and patient-assessed outcomes (if available)	- _____
		10b Important follow-up diagnostic and other test results	- _____
		10c Intervention adherence and tolerability (How was this assessed?)	- _____
8a	Diagnostic	10d Adverse and unanticipated events	<u>fetal malformation</u>
Discussion		11a A scientific discussion of the strengths AND limitations associated with this case report <u>In this case report, fetus was found with abnormal heart structure and bilateral renal cystic changes at 25 + 3 weeks of gestation. The mother had a history of viral infection (SARS-CoV-2, cytomegalovirus, and Epstein-Barr virus) and antiviral drugs (Arbidol) in the second-trimester of pregnancy. In addition , the woman was 36-year-old, which is a high-risk factor of birth defect(16). However, these findings did not exclude a multifactorial pathogenesis which led to fetal malformations. We speculate that multiple risk factors contributed to the formation of fetal malformation in this case. SARS-CoV-2 infection contribute to maternal inflammation, which can adversely affect the fetus. Further genetic studies are required to identify the genotype of the fetus.</u>	<u>In this case report,</u>
		11b Discussion of the relevant medical literature with references	- _____
		11c The scientific rationale for any conclusions (including assessment of possible causes) <u>SARS-CoV-2 infection in second-trimester pregnancy not the direct factor resulted in congenital defects, and multiple risk factors contribute to these changes.</u>	<u>SARS-CoV-2 infection</u>
		11d The primary “take-away” lessons of this case report (without references) in a one paragraph conclusion	- _____
Patient Perspective	12	The patient should share their perspective in one to two paragraphs on the treatment(s) they received	- _____
Informed Consent	13	Did the patient give informed consent? Please provide if requested	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>