



Congenital STORCH infections = infection in the **fetal period** by one of a group of pathogens that cause a **similar constellation of clinical features** after intrauterine transmission.

Symptomatology depends on **timing of transmission** during pregnancy.

INITIAL EVALUATION

- History and physical examination
- Labs: CBC, LFTs
- Imaging: head and abdomen
- Referrals: audiology, ophthalmology
- +/- Lumbar puncture

PRESENTATION

Confirmed intrapartum maternal STORCH infection
or
Fetal clinical presentation



Microcephaly, intracranial calcifications, hydrocephalus, seizures, lethargy, fever



Chorioretinitis, cataracts, microphthalmia



Sensorineural hearing loss



Feeding difficulties, hepatosplenomegaly, elevated transaminases



Congenital heart disease, myocarditis



Thrombocytopenia, anemia



Purpuric rash, erythematous rash, jaundice



IUGR, hydrops fetalis, preterm labor, intrauterine demise



	S	T	O (Other)		R	C	H
Pathogen	Syphilis	Toxo-plasmosis	Varicella Zoster Virus (VZV)	Parvovirus B19	Rubella	Cytomega- lovirus (CMV)	Herpes Simplex Virus (HSV)
Prenatal screening	Maternal syphilis EIA and RPR	None	Maternal VZV IgG	None	Maternal rubella IgG	None	Maternal skin lesion swab PCR
Initial diagnostic tests	Infant syphilis serology & RPR	Infant toxoplasma IgG, IgM, IgA	Infant VZV IgG, IgM & lesion PCR	Infant parvovirus IgM, IgG & serum PCR	Infant rubella IgM, IgG & urine / throat PCR	Infant urine / saliva PCR	Infant serum / CSF / skin PCR

MANAGEMENT

- Early family counselling on possible long-term sequelae.
- Early involvement of Peds ID.



In utero

Involve **maternal-fetal specialists** to follow baby's development.



Birth

Skilled **NICU ready** for transfer. Care team at delivery.



Infant

Supportive treatment. Specific treatment once pathogen known.

Published January 2022

Terra Morel (Medical Student, University of Alberta) and Dr. Sarah Forgie (Professor, Pediatric Infectious Disease, University of Alberta) for www.pedscases.com