

INFECTION (CONGENITAL)• 1/3

RECOGNITION AND ASSESSMENT

Brain

- Intracranial calcifications
- Microcephaly
- Hydrocephaly
- Seizures

Blood

- Disseminated intravascular coagulation
- Cytopenias
- Bleeding
- Lymphadenopathy

Skin

- Vesicular or bullous lesions
- Pustular or scarring lesions
- Petechiae or purpura
- Condylomata lata
- Desquamation (hands and feet)

In-utero

- Intrauterine growth restriction
- Oligo- or polyhydramnios
- Hydrops

Eyes and ENT

- Microphthalmia
- Congenital cataracts
- Chorioretinitis or keratitis
- Sensorineural hearing loss or failed newborn hearing screen
- Haemorrhagic rhinitis
- Saddle nose

Skeletal

- Bony abnormalities
- Limb malformations

System Involvement

- Sepsis
- Myocarditis
- Congenital cardiac anomalies
- Congenital glomerulonephritis

Liver

- Hepatitis
- Hepato- or splenomegaly
- Jaundice
- Ascites

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INVESTIGATIONS

- If history of foreign travel in pregnancy, discuss with paediatric infectious diseases

Table 1

Clinical scenario	S	C	O			R	T	C	H		
			Parvo-virus B19	Enterovirus	Other				VZV	HSV	HIV
Abnormal brain development	✓	✓	✓	-	✓	✓	✓	✓	✓	-	-
Sepsis	✓	✓	-	✓	✓	-	✓	✓	✓	-	-
Petechiae/purpura, extramedullary haematopoiesis	✓	✓	✓	-	-	✓	✓	✓	✓	-	-
Blisters	✓	✓	-	-	-	✓	✓	✓	✓	-	-
Intrauterine growth restriction	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	-
Abnormal antenatal scans*	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	-
Eye disease	✓	✓	-	-	✓	✓	✓	✓	✓	-	-
Hearing loss	✓	✓	-	-	✓	✓	✓	✓	✓	-	-
Limb abnormalities	✓	-	-	-	✓	✓	-	✓	-	-	-
Cardiac abnormalities	✓	-	-	✓	✓	✓	-	-	-	-	-
Liver abnormalities	✓	✓	-	✓	-	✓	✓	-	✓	-	-
No antenatal booking bloods**	-	-	-	-	-	-	-	-	✓	✓	-

* Periventricular calcification, hyperechogenic bowel, ventriculomegaly, microcephaly, fetal growth restriction, hydrops

** URGENT sample required: HIV, syphilis (paired – not cord blood), hepatitis B serology

Key

S	Syphilis
C	Cytomegalovirus
O	Other
R	Rubella
T	Toxoplasmosis
C	Chicken pox
H	Herpes simplex and other blood borne viruses

Specific investigations

- Send placental samples for histopathology and microbiology/virology stating 'suspected congenital infection'

Syphilis

- See **Syphilis – babies born to mothers with positive serology guideline** for investigations and management

CMV

- See **CMV guideline** for investigations and management

Other

Parvovirus B19

- PCR: blood

Enterovirus

- PCR: blood, NPA/nasal secretions, skin lesions if appropriate

Rubella

- PCR: blood and saliva
- Audiology and ophthalmology review

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Toxoplasmosis

- Paired maternal/infant serology (not cord blood)
- Add serology to booking bloods
- PCR: neonatal blood, placenta
- Placental microscopy
- Cranial US +/- MRI head
- Audiology and ophthalmology review

Chickenpox (VZV)

- See Fetal varicella syndrome section of **Varicella** guideline

HSV, HIV, Hepatitis, HTLV-1

- See **Herpes simplex virus (HSV)**, **Human immunodeficiency virus (HIV)** and **Hepatitis B and C** guidelines

If high clinical suspicion or positive results refer to paediatric infectious diseases