PAEDIATRICS

SCARLET FEVER AND SLAPPED CHEEK SYNDROME

Both scarlet fever and slapped cheek syndrome cause a rash affecting the cheeks and trunk. However they are quite different conditions and the treatment is different.

Scarlet Fever

Slapped Cheek Syndrome (fifth disease/erythema infectiosum)

Comparison of Scarlet Fever and Slapped Cheek Syndrome

	Scarlet Fever	Slapped Cheek
Organism	Exotoxin-mediated reaction to Group A Streptococcus infection (usually throat but other sites too)	Parvovirus B19
Age	<10 years	3-15 years
Transmission	Respiratory droplets	Respiratory droplets
Infective Period	Initial subclinical phase and acute illness. Isolate from school until after 24 hours of antibiotics.	No longer infective once rash appears.
Rash	Diffuse erythema/maculopapular rash of face, trunk and limbs. Begins on neck or upper trunk. May peel. Circumoral pallor on face. Sandpaper texture.	Red rash on face sparing the nose, perioral and periorbital regions. May spread to trunk and limbs as a macular rash especially on extensor surfaces.
Other features	Rash preceded 1-2 days by fever, sore throat, myalgias, vomiting. Strawberry tongue. Cervical lymphadenopathy.	Rash preceded 1/52 by coryza, sore throat, headache, low grade fever. Rash appears a few days after fever resolves. Occasionally arthropathy
Treatment	10/7 phenoxymethylpenicillin	Usually none
Notifiable	Yes	No

Although the courses of both diseases are usually benign, both have complications. Unfortunately, due to the non-specific nature of parvovirus infection during its infective stage it is often impossible to avoid contact with pregnant women.

Complications

GAS – Suppurative	GAS – Non-Suppurative	Parvovirus B19
Meningitis/brain abscess (local extension)	Acute rheumatic fever	Transient aplastic crisis (if sickle cell/thalassaemia etc)
Tonsillopharyngeal abscess	Streptococcal toxic shock	ITP (rare)
Otitis Media	Acute glomerulonephritis	Meningoencephalitis (rare)
Sinusitis		Foetal loss (5-10% chance)
Necrotizing fasciitis		Hydrops foetalis
Bacteraemia		Foetal anaemia
Jugular thrombophloebitis		Foetal myocarditis/hepatitis
		Congenital abnormalities