

Roseola

Roseola is an infectious disease caused by certain types of virus.^[2] Most infections occur before the age of three.^[1] Symptoms vary from absent to the classic presentation of a fever of rapid onset followed by a rash.^{[1][2]} The fever generally lasts for three to five days.^[1] The rash is generally pink and lasts for less than three days.^[1] Complications may include febrile seizures, with serious complications being rare.^{[1][2]}

It is caused by either *human herpesvirus 6* (HHV-6) or *human herpesvirus 7* (HHV-7).^[1] Spread is usually through the saliva of those who are otherwise healthy.^{[1][2]} However, it may also spread from the mother to baby during pregnancy.^[1] Diagnosis is typically based on symptoms but can be confirmed with blood tests.^[1] Low numbers of white blood cells may also be present.^[1]

Treatment includes sufficient fluids and medications to treat the fever.^[1] Nearly all people are infected at some point in time.^[2] Males and females are affected equally often.^[1] The disease was first described in 1910 while the causal virus was determined in 1988.^[1] The disease may reactivate in those with a weakened immune system and may result in significant health problems.^[2]

Contents

- Signs and symptoms
- Cause
- Prevention
- Treatment
- History
- Names
- Research
- See also
- References
- External links

Roseola	
Other names	Exanthema subitum, ^[1] roseola infantum, ^[1] sixth disease, ^[1] baby measles, rose rash of infants, three-day fever
	
Roseola on a 21-month-old girl	
Specialty	Infectious disease
Symptoms	Fever followed by rash ^[1]
Complications	Febrile seizures ^[1]
Usual onset	Before the age of three ^[1]
Duration	Few days ^[2]

Signs and symptoms

Roseola typically affects children between six months and two years of age, and begins with a sudden high fever (39–40 °C; 102.2-104 °F). In rare cases, this can cause febrile convulsions (also known as febrile seizures or "fever fits") due to the sudden rise in body temperature, but in many cases the child appears normal. After a few days the fever subsides, and just as the child appears to be recovering, a red rash appears. This usually begins on the trunk (torso) and then spreads to the arms, legs, and neck. The rash is not itchy and may last 1 to 2 days.^[3] In contrast, a child suffering from measles would usually appear sicker, with symptoms of conjunctivitis, cold-like symptoms, and a cough, and their rash would affect the face and last for several days. Liver dysfunction can occur in rare cases.

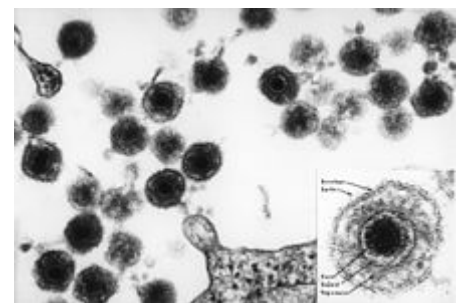
Causes	<i>Human herpesvirus 6 (HHV-6) or human herpesvirus 7 (HHV-7)</i> ^[1]
Diagnostic method	Typically based on symptoms ^[1]
Differential diagnosis	Measles, rubella, scarlet fever ^[1]
Treatment	Supportive care ^[1]
Prognosis	Generally good ^[1]

A small percentage of children acquire HHV-6 with few signs or symptoms of the disease. Exanthema subitum occurs in approximately 30% of children during primary HHV-6 infection.^[4] Others may show symptoms significant enough that other more serious infections, such as meningitis or measles should be ruled out. In case of febrile seizures, medical advice can be sought for reassurance. However, febrile seizures are not harmful, do not require treatment, and have no long term negative effects unless they last longer than five minutes.

In rare cases, HHV-6 can become active in an adult previously infected during childhood and can show signs of mononucleosis.^[5]

Cause

Roseola is caused by two human herpesviruses, *human herpesvirus 6* (HHV-6) and *human herpesvirus 7* (HHV-7), which are sometimes referred to collectively as Roseolovirus. There are two variants of HHV-6 (HHV-6a and HHV-6b) and studies in the US, Europe, Dubai and Japan have shown that exanthema subitum is caused by HHV-6b. This form of HHV-6 infects over 90% of infants by age 2.



Electron micrograph of HHV-6

Prevention

There is no specific vaccine against or treatment for exanthema subitum, and most children with the disease are not seriously ill.

Treatment

Most cases of HHV-6 infection get better on their own.^[6] If encephalitis occurs ganciclovir or foscarnet may be useful.^[7]

History

John Zahorsky MD wrote extensively on this disease in the early 20th century, his first formal presentation was to the St Louis Pediatric society in 1909 where he described 15 young children with the illness. In a JAMA article published on Oct 18, 1913 he noted that "the name 'Roseola infantilis' had an important place in the medical terminology of writers on skin diseases" but that descriptions of the disease by previous writers tended to confuse it with many other diseases that produce febrile rashes. In this JAMA article Zahorsky reports on 29 more children with Roseola and notes that the only condition that should seriously be considered in the differential diagnosis is German Measles (rubella) but notes that the fever of rubella only lasts a few hours whereas the prodromal fever of Roseola lasts three to five days and disappears with the formation of a morbilliform rash.^[8]

Names

Country	Local name (language)	Translated name
Belgium	Driedagenkoorts (Dutch) Zesde ziekte (Dutch) Roséole (French)	"three-day fever" "sixth disease" -
China (PRC)	急疹 (Mandarin) jí zhěn (pinyin)	"fast rash"
Czech republic	Šestá nemoc (Czech)	"sixth disease"
Denmark	Tredagsfeber (Danish)	"three day fever"
Estonia	Roseool, kolme päeva palavik	Roseola/three day fever
Finland	Vauvarokko (Finnish)	"baby measles"
France	Roséole	"Roseola"
Germany	Drei-Tage-Fieber (German)	"three-day fever"
Greece	Αιφνίδιο εξάνθημα (Greek)	"sudden rash"
Hungary	Háromnapos láz (Hungarian) Hatodik betegség (Hungarian)	"three-day fever" "sixth disease"
Iceland	Mislingabróðir (Icelandic)	"measles' brother"
Israel	Tifrachat vrooda תפרחת ורודה (Hebrew)	"rose/pink rash"
Italy	Sesta malattia (Italian)	"sixth disease"
Japan	突発性発疹 (Japanese) toppatsuseihasshin	"fast/sudden rash"
Korea (South)	돌발진 (Korean) Dolbaljin	"fast/sudden rash"
Malaysia	Campak halus (Malay)	"small/tiny measles"
Netherlands	Zesde ziekte (Dutch)	"sixth disease"
Norway	Fjerde barnesykdom (Norwegian) ^[9]	"fourth disease"
Philippines	Tigdas Hangin (Tagalog)	"wind measles"
Poland	Gorączka trzyniowa (Polish)	"three-day fever"
Romanian	Roseola eruptia subita	Roseola
Russia	Розеола (Russian) шестая болезнь (Russian)	Roseola "sixth disease"
Singapore	Jiǎ má 假麻 (Chinese)	"false measles"
Slovakia	Šiesta (detská) choroba (Slovak)	"sixth disease"
Slovenia	Šesta bolezen (Slovenian)	"sixth disease"
South Africa	Roseola (English)	"Roseola"
Sweden	Tredagarsfeber Sjätte sjuken (Swedish)	"three-day fever" Sixth disease
Taiwan	Méiguī zhěn 玫瑰疹 (Chinese)	"rose rash"
Turkey	Altıncı hastalık (Turkish)	"sixth disease"
Vietnam	Sốt phát ban (Vietnamese)	"baby rash"

Research

HHV-6 has been tentatively linked with neurodegenerative disease.^[10]

See also

- [Fifth disease](#)

References

1. Stone, RC; Micali, GA; Schwartz, RA (April 2014). "Roseola infantum and its causal human herpesviruses". *International Journal of Dermatology*. **53** (4): 397–403. doi:10.1111/ijd.12310 (<https://doi.org/10.1111%2Fijd.12310>). PMID 24673253 (<https://pubmed.ncbi.nlm.nih.gov/24673253>).
2. Campadelli-Fiume, Gabriella (1999). "Human Herpesvirus 6: An Emerging Pathogen" (http://wwwnc.cdc.gov/eid/article/5/3/99-0306_article). *Emerging Infectious Diseases*. **5** (3): 353–366. doi:10.3201/eid0503.990306 (<https://doi.org/10.3201%2Feid0503.990306>). PMC 2640789 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2640789>). PMID 10341172 (<https://pubmed.ncbi.nlm.nih.gov/10341172>). Archived (https://web.archive.org/web/20170926100607/https://wwwnc.cdc.gov/eid/article/5/3/99-0306_article) from the original on 26 September 2017. Retrieved 26 September 2017.
3. *Roseola – Topic Overview* (<http://www.webmd.com/skin-problems-and-treatments/tc/roseola-topic-overview>) Archived (<https://web.archive.org/web/20080727031317/http://www.webmd.com/skin-problems-and-treatments/tc/roseola-topic-overview>) 2008-07-27 at the *Wayback Machine*, webmd.com
4. Zerr, D. M.; Meier, A. S.; Selke, S. S.; Frenkel, L. M.; Huang, M. L.; Wald, A.; Rhoads, M. P.; Nguy, L.; Bornemann, R.; Morrow, R. A.; Corey, L. (2005). "A Population-Based Study of Primary Human Herpesvirus 6 Infection". *New England Journal of Medicine*. **352** (8): 768–776. doi:10.1056/NEJMoa042207 (<https://doi.org/10.1056%2FNEJMoa042207>). PMID 15728809 (<https://pubmed.ncbi.nlm.nih.gov/15728809>).
5. Stoeckle MY (2000). "The spectrum of human herpesvirus 6 infection: from roseola infantum to adult disease". *Annu. Rev. Med.* **51**: 423–30. doi:10.1146/annurev.med.51.1.423 (<https://doi.org/10.1146%2Fannurev.med.51.1.423>). PMID 10774474 (<https://pubmed.ncbi.nlm.nih.gov/10774474>).
6. Tesini, BL; Epstein, LG; Caserta, MT (December 2014). "Clinical impact of primary infection with roseoloviruses" (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4267952>). *Current Opinion in Virology*. **9**: 91–6. doi:10.1016/j.coviro.2014.09.013 (<https://doi.org/10.1016%2Fj.coviro.2014.09.013>). PMC 4267952 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4267952>). PMID 25462439 (<https://pubmed.ncbi.nlm.nih.gov/25462439>).
7. Ongrádi, J; Ablashi, DV; Yoshikawa, T; Stercz, B; Ogata, M (February 2017). "Roseolovirus-associated encephalitis in immunocompetent and immunocompromised individuals" (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5329081>). *Journal of NeuroVirology*. **23** (1): 1–19. doi:10.1007/s13365-016-0473-0 (<https://doi.org/10.1007%2Fs13365-016-0473-0>). PMC 5329081 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5329081>). PMID 27538995 (<https://pubmed.ncbi.nlm.nih.gov/27538995>).
8. John Zahorsky. Roseola Infantum. *Journal of the American Medical Association*. Oct 18, 1913 pages 1446-1450
9. Nylander, Gro (2009) "Lille venn, hva nå?"
10. Hogestyn, JM; Mock, DJ; Mayer-Proschel, M (February 2018). "Contributions of neurotropic human herpesviruses herpes simplex virus 1 and human herpesvirus 6 to neurodegenerative disease pathology" (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5879884>). *Neural Regeneration Research*. **13** (2): 211–221. doi:10.4103/1673-5374.226380 (<https://doi.org/10.4103%2F1673-5374.226380>). PMC 5879884 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5879884>). PMID 29557362 (<https://pubmed.ncbi.nlm.nih.gov/29557362>).

External links

<div><ul style="list-style-type: none">▪ DermNet viral/roseola (https://www.dermnetnz.org/viral/roseola.html)</div>	<div>Classification ICD-10: B08.2 (http://apps.who.int/classifications/icd10/browse/2016/en#/B08.2) • ICD-9-CM: 057.8 (http://www.icd9data.com/getICD9Code.ashx?icd9=057.8) • MeSH: D005077 (https://www.nlm.nih.gov/cgi/mesh/2015/MB_cgi?field=uid&term=D005077) • DiseasesDB: 5857 (http://www.diseasesdatabase.com/ddb5857.htm)</div>
	<div>External resources MedlinePlus: 000968 (https://www.nlm.nih.gov/medlineplus/ency/article/000968.htm) • eMedicine: emerg/400 (https://emergency.medscape.com/emerg/400-overview) http://www.emedicine.com/derm/topic378.htm#) ped/998 (http://www.emedicine.com/ped/topic998.htm#)</div>

Retrieved from "<https://en.wikipedia.org/w/index.php?title=Roseola&oldid=922492033>"

This page was last edited on 22 October 2019, at 13:14 (UTC).

Text is available under the [Creative Commons Attribution-ShareAlike License](#); additional terms may apply. By using this site, you agree to the [Terms of Use](#) and [Privacy Policy](#). Wikipedia® is a registered trademark of the [Wikimedia Foundation, Inc.](#), a non-profit organization.