

# Case report 8

# Herpes zoster during pregnancy about one case report



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#### Abstract

A lot of infectious diseases can occur in pregnancy. Their acquisition, clinical presentation, and course during gestation may be altered due to deficiency of the maternal cellular immunity. Herpes zoster, also known as shingles, (reactivation of varicella zoster virus) is one of the least infections which can be contracted by pregnant woman. But it does not present a big problem to mother or baby. The complications of zoster in pregnancy are no different from those in non-pregnant women.

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### Introduction

Varicella zoster virus causes two different diseases, chickenpox (varicella) and shingles (herpes zoster). The relationship between these two diseases has been understood for more than 100 years and is based on this observation: varicella zoster virus remains latent in human neurons for decades after varicella infection and sufficient varicella zoster virus -specific cell mediated cellmediated immunity is necessary to maintain latency [1].

# **Patient and observation**

A 22 years old pregnant woman was admitted in our department for preterm premature rupture of membranes at 34 weeks of amenorrhea. She has a flare up of herpes zoster at the T10 to T11 dermatomes (Figure 1, Figure 2). She was treated symptomatically and rash disappeared after 2 weeks (Figure 3). Delivery was programmed at 37 weeks of amenorrhea to decrease risks of contamination of the newborn infant. The baby was healthy and he had not any rashes.

#### Discussion

Following a primary infection with the varicella-zoster virus, the virus can remain latent in the dorsal root ganglia and might cause herpes zoster by reactivation. Clinically, herpes zoster causes contagious vesicular rashes, pain and itching in the dermatome distribution [2] and it is preceded in 80% cases by prodromal symptoms like pain and parasthesias [3]. With the exception of generalized herpes zoster, there is no viremia and usually no transplacental infection. The mother has neutralizing antibodies against varicella zoster virus which are passed on to the fetus through the placenta. Newborn infant possess specific maternal IgG class antibodies and there is usually no longer viremic spread of varicella zoster virus [4]. A prospective study reported on 474 women diagnosed with herpes zoster during pregnancy. There were only 2 children with malformations, but no cases of congenital varicella syndrome among the live births and no serologic evidence of intrauterine infection [5]. There are no significant risks for the mother and infant associated with herpes zoster in pregnancy. Treatment of herpes zoster in imuno-competent pregnant women should be symptomatic; topical or systemic antiviral therapy is not recommended [6].

#### Conclusion

Herpes zoster during pregnancy, unlike chickenpox, is not associated with increased risk of congenital malformations above the general population. Individuals with herpes zoster should cover their lesions in order to reduce the risk of transmitting varicella zoster virus to susceptible pregnant women.

### **Competing interests**

The authors declare no competing interests.

### **Authors' contributions**

All the authors have read and agreed to the final manuscript.

#### **Figures**

Figure 1: characteristic distribution of zosterFigure 2: rash zosterFigure 3: zoster rash after recovery

# References

- Anne A Gershon, Michael D Gershon, Judith Breuer, Myron J Levin, Anne Louise Oaklander, Paul D Griffiths. Advances in the understanding of the pathogenesis and epidemiology of herpes zoster. Journal of Clinical Virology. 2010;48(S1):S2-S7. PubMed | Google Scholar
- Pupco A, Pina Bozzo, Gideon Koren. Herpes zoster during pregnancy. Canadian Family Physician. 2011 Oct;57(10):1133. PubMed | Google Scholar
- Khalea Hayward, Abigail Cline, Angela Stephens, Linda Street. Management of herpes zoster (shingles) during pregnancy. Journal of Obstetrics and Gynaecology. 2018 Oct;38(7):887-894. PubMed | Google Scholar



Figure 1: characteristic distribution of zoster

- Müllegger Robert R, Häring Nina S, Glatz Martin. Skin Infections in Pregnancy. Clinics in Dermatology. 2016;34(3): 368-377. Google Scholar
- Enders G, Miller E. Varicella and herpes zoster in pregnancy and the newborn. In: Arvin AM, Gershon AA, editors. Varicella-zoster virus. Virology and clinical management, Cambridge, UK: Cambridge University Press. 2000;317-47. Google Scholar
- Kempf W, Meylan P, Gerber S, Aebi C, Agosti R, Büchner S *et al.* Swiss recommendations for the management Of varicella zoster virus infections. Swiss Medical Weekly. 2013;137(17-18):239-251. PubMed | Google Scholar



Figure 2: rash zoster



Figure 3: zoster rash after recovery