

## Multiple Bruises and Petechiae in a Child with the Diagnosis of Chickenpox

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### ABSTRACT

Chickenpox is a highly contagious disease caused by the varicella-zoster virus. It's a benign and self-limited viral exanthematous infection but may be associated with complications requiring hospitalization.

### BACKGROUND

Chickenpox is a highly contagious disease caused by the varicella-zoster virus. It's a benign and self-limited viral exanthematous infection but may be associated with complications requiring hospitalization [1,2]. Immune thrombocytopenic purpura (ITP) is an acquired immune-mediated and usually self-limited condition characterized by low platelet counts [2]. The cause of ITP is unknown, but some established triggers include a previous viral, immunologic, or environmental inciting event [2-4]. ITP associated with chickenpox is well described in the pediatric population, but severe immune-mediated thrombocytopenia with bleeding is very rare in children [4]. Although it can lead to life-threatening bleeding complications (gastrointestinal or intracranial hemorrhage) if left untreated, isolated thrombocytopenia in previously healthy children has an excellent prognosis [2-4].

Despite being a disease with a relatively great outcome, parents should be warned about possible complications. Thus, ant this case emphasizes that, doctors assume a very important role in reassuring the parents about the benign course of the disease and all the important aspects they must take notice such as changes in the characteristics of skin lesions, especially if hemorrhagic, which requires urgent medical observation.

### CASE PRESENTATION

A 4-year-old boy presented to the emergency department six days after being diagnosed with chickenpox, due to bruises on forearms and lumbosacral region associated with petechiae on the lower limbs and thoracic region. He also mentioned a single episode of epistaxis. There was no history of cough, vomiting, jaundice or bleeding from other body parts. He had been diagnosed with acute pharyngitis 10 days earlier, medicated with ibuprofen, without improvement. On admission, he had hemorrhagic vesicular-crusted lesions (**Figures 1 & 2**), numerous petechiae in the

abdominal region, trunk and lower extremities, scattered ecchymosis and subconjunctival hemorrhage. Hemogram showed: hemoglobin 10.8 g/dL, WBC count  $8,46 \times 10^3/uL$  (37,3% neutrophils; 56% lymphocytes) and platelets 2000/uL. Blood type ORh+, Coombs Test negative and examination of the peripheral blood smear showed reactive lymphocytes. Normal humoral immune function. Viral markers for hepatitis B, C and HIV were negative. He was treated with a single dose of intravenous immunoglobulin (1g/kg), with platelet count recovery to 110000/uL five days after infusion. Posteriorly presented oscillating platelet counts between 15 and 24000/uL, with normalization after six weeks (platelets 119000/uL).

### CONCLUSION

Immune thrombocytopenic purpura (ITP) is an acquired immune-mediated and usually self-limited condition characterized by low platelet counts [2]. The cause of ITP is unknown, but some established triggers include a previous viral, immunologic, or environmental inciting event [2-4]. ITP associated with chickenpox is well described in the pediatric population, but severe immune-mediated thrombocytopenia with bleeding is very rare in children [4]. Although it can lead to life-threatening bleeding complications (gastrointestinal or intracranial hemorrhage) if left untreated, isolated thrombocytopenia in previously healthy children has an excellent prognosis [2-4].

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**Figure 1.** Hemorrhagic vesicular-crusted lesions and ecchymosis in the face.



**Figure 2.** Hemorrhagic vesicular-crusted lesions and ecchymosis in the low back.

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**REFERENCES**

1. Blair RJ (2019) Varicella Zoster Virus. *Pediatr Rev* 40(7): 375-377.
2. McInerney TK, Adam HM, Campbell DE, DeWitt TG, Foy JM, et al. (2017) American Academy of Pediatrics Textbook of Pediatric Care. 2<sup>nd</sup> ed. Elk Grove Village, IL: American Academy of Pediatrics.
3. Jayachandran S, Singh K, Kayal L (2021) Idiopathic thrombocytopenic purpura. *Contemp Clin Dent* 5(3): 410-414.
4. Labarque V, Geet CV (2014) Clinical practice: Immune thrombocytopenia in pediatrics. *Eur J Pediatr* 173: 163-172.