

Periorbital petechiae after emesis in a young woman

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A 27-year-old woman presented to the dermatology clinic with a 1-day history of sudden-onset, painless, nonpruritic, periorbital rash. The patient had several episodes of intense vomiting related to alcohol intake 1 day before onset of the rash. She was previously healthy and had not taken medications around the time of rash onset. On examination, we observed nonpalpable petechiae (1–2 mm in diameter), involving both periorbital regions and cheeks, that did not blanch under direct pressure of a glass slide (Figure 1). The only laboratory investigation we ordered was a complete blood count, which showed a normal platelet count and mean platelet volume. We diagnosed petechiae induced by elevated intravascular pressure from her vomiting. The rash resolved after 1 week without any therapeutic intervention. On a phone follow-up 2 years later, she reported no recurrence of petechiae since her initial presentation.

Cutaneous purpuric lesions are a result of extravasation of blood into the skin or subcutaneous tissue. Petechiae are small lesions that measure less than 2 mm in diameter. Lesions between 2 mm and 10 mm are purpura and become ecchymoses when they are more than 10 mm in diameter.¹ Periorbital petechiae are a clinical sign of elevated intravascular pressure induced by events such as severe vomiting, coughing, crying, infant delivery and the Valsalva manoeuvre.^{1,2} Concerning causes of periorbital petechiae include seizures and strangulation.^{2,3} It is also important to consider the possibility of interpersonal violence as a cause of facial petechiae. A detailed medical and social history, along with physical examination, can help determine subsequent investigations. Petechiae induced by elevated intravascular pressure and no other underlying medical condition usually resolve after 1–2 weeks and do not require further investigation or treatment.

References

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Figure 1: Petechiae on both periorbital regions and cheeks of a 27-year-old woman.

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