

# Fluid-filled striae in a patient with hypoalbuminemia

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**A** 57-year-old woman presented with progressive severe edema that affected her limbs and trunk and a one-week history of nonbloody diarrhea. On examination, she also had numerous linear, lobulated, fluid-filled skin lesions (Figure 1) that flattened with transient pressure. These were a result of fluid gathering within pre-existing stretch marks. Investigations were consistent with hypoalbuminemia (serum albumin < 15 [normal 35–50] g/L; urine protein 0.12 g per 24 hours), secondary to protein-losing enteropathy associated with *Clostridium difficile* infection. Liver enzymes were normal. The lesions resolved following treatment with antibiotics and diuresis.

Striae distensae, also known as stretch marks, are a form of dermal scarring that present initially as reddish-purple linear plaques (striae rubrae) before fading into hypopigmented, atrophic lesions (striae albae).<sup>1</sup> Striae distensae are associated with pregnancy, rapid weight gain, and systemic or topical corticosteroid use; they most frequently develop in women and teenagers.<sup>1,2</sup> In conditions characterized by severe edema, such as various causes of hypoalbuminemia and heart failure, interstitial fluid can collect preferentially within pre-existing striae distensae, where the tissue's tensile strength is reduced because of an atrophic epidermis overlying areas of abnormal dermal collagen.<sup>2,3</sup> Bullous autoimmune skin conditions and bullous infections must also be considered in the differential diagnosis.<sup>3</sup> Diuresis results in flattening of the fluid-filled lesions.<sup>2</sup> Awareness of this striking but benign skin finding in patients with hypoalbuminemia can prevent unnecessary interventions.

## References

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**Figure 1:** Fluid-filled striae distensae on the lateral abdomen of a 57-year-old woman with severe edema secondary to hypoalbuminemia.

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The authors have obtained patient consent.

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