Letter to the Editor AMJ 2013 6, 5

Author's reply: Clarifications on "Neonatal sepsis and multiple skin abscess in a newborn with Down's syndrome: A case report"

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Dear Editor,

We would like to clarify our case report on "Neonatal sepsis and multiple skin abscess in a newborn with Down's syndrome: A case report"¹in response to a letter to the Editor by Easow *et al.*²

Ecthyma gangrenosum (EG) is a rare cutaneous infection most often associated with blood stream infections in critically ill and immunocompromised patients. EG occurs in 6% of patients with Pseudomonas aeruginosa sepsis, but can also occur with other bacterial and fungal agents.³ The basis of association between Down's syndrome and Ecthyma gangrenosum is impaired immunity as pointed out by Easow *et al.*²

However, EG would be an unusual diagnosis in this neonate. Haemorrhagic bulla or pustules and necrotic punched-out ulcers with raised edges surrounded by pink or violaceous skin are characteristic lesions of EG.^{3,4} These lesions were absent in our case. Also there was no dense, black, depressed, crusted lesion or eschar formation in the centre of the necrotic area, on lumber region of back. Although the superficial abscesses showed features of acute inflammation with erythema of the overlying skin, no transition from macule, vesicle or pustule to ulcer were seen. EG can involve single or multiple areas, but most often it involves anogenital and axillary areas followed by limbs, face and trunk.⁴ However, anogenital and axillary areas were unaffected in this case.

The cause of skin involvement in EG is haematogenous seeding and therefore in histologic examination it shows characteristic necrotising hemorrhagic vasculitis with paucity of inflammatory cells and plenty of bacilli in the tunica media and adventitia.³ Although skin biopsy would rule out EG, it

was not done since the newborn responded well to treatment.

Only few cases of EG are documented in neonates, especially in preterm and low birth weight babies. To date there are no reports of EG in neonates with Down's syndrome. The mortality rate of EG is as high as 15.4% even in the absence of bacteraemia and the importance of early diagnosis is well established.³ We would like to thank Easow *et al* for highlighting the importance of Ecthyma gangrenosum in clinical practice.

Sincerely,

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