fevers.[1] Relative bradycardia occurs in more than 80% of febrile adult returned travellers with enteric fever (*Salmonella* Typhi and Paratyphi) and is an independent predictor for the diagnosis adjusted odds ratio: 11.7; 95% confidence interval: 3.21–42.5). However, it lacks specificity, also affecting half of matched controls without enteric fever.[2]

References

1 Cunha BA. The diagnostic significance of relative bradycardia in infectious disease. *Clin. Microbiol. Infect.* 2000; **6**: 633–4.
2 Matono T, Kutsuna S, Kato Y *et al*. Role of classic signs as diagnostic predictors for enteric fever among returned travellers: Relative bradycardia and eosinopenia. *PLoS One* 2017; **12**: e0179814.

Improbable lesion in a child

Answer

Histological examination demonstrated a basal cell carcinoma (BCC). The patient underwent a wide-margin surgical excision. Currently, the patient is under follow-up, without any recurrence within 1 year.

BCC is the most common malignant skin tumour. It is most frequently diagnosed in the elderly, but BCC has also been described in children. In the paediatric age group, it is usually associated with a predisposing genetic condition, such as basal cell nevus syndrome and xeroderma pigmentosum. High-dose radiotherapy and increased sun exposure have been described as additional risk factors. In our case, both patient and family history was unremarkable, and besides the skin tumour, no genodermatoses signs were seen. Nevertheless, although the most likely aetiology was assumed to be sun exposure, it is important to maintain regular follow-up of the patient.

It is estimated that diseases associated with increased ultraviolet radiation exposure will rise in the future, and given that the BCC age of appearance is decreasing, this tumour should be considered in the differential diagnosis of childhood skin lesions. We report this case because of its rarity and to highlight the importance of a high level of suspicion to warrant prompt diagnosis and to adequately manage the patient.

Follow the lesion: A missed opportunity in infancy

Answer: Syphilis

The 10-month-old infant had a rapid plasma reagin titre >1:512. Testing had been prompted by positive maternal syphilis serology in a subsequent pregnancy. No other clinical, laboratory or radiological features of syphilis were present (including cerebrospinal fluid analysis). Intravenous benzylpenicillin was administered for 10 days. The initial presentation was likely simultaneous primary and secondary syphilis, with a primary scalp chancre persisting at the site of inoculation from maternal infection acquired late in pregnancy. Syphilis serology and darkfield microscopy or treponemal polymerase chain reaction on a sample of the scalp eschar (the chancre) would have prevented a delay in diagnosis. The short time to this mother's subsequent pregnancy was serendipitous and, with partial ceftriaxone treatment, likely prevented major syphilis sequelae for this young girl.[1]

Elimination of vertical transmission of syphilis has been identified as a key public health initiative by the World Health Organisation.[2] The risk of vertical transmission causing congenital syphilis is greatest in the early stages of maternal disease (i.e. infection during pregnancy).[3] In Australia, between 2007 and 2016, there were 90 cases of syphilis in children and adolescents younger than 15 years of age.[4] Forty-three cases were congenital syphilis, and more than half of those affected were of Aboriginal or Torres Strait Islander background.[4] More recently, six infant deaths in Australia have been attributed to congenital syphilis.[5]

There are, thankfully, few local opportunities for Australians clinicians to gain experience in diagnosis and management of infants affected by congenital syphilis. This case is a reminder that early antenatal serology does not rule out maternal infection late in pregnancy, and subsequent congenital infection. Routine repeat syphilis screening in the third trimester may cost-effectively reduce the incidence of congenital syphilis.[6] Repeat screening should always be attempted if there are identifiable continuing risks for infection, such as intravenous drug use or sex work. Because of the multiple and major sequelae of untreated congenital syphilis, there should be a low threshold for requesting syphilis serology for unwell infants and darkfield microscopy (if accessible) and/or molecular studies of unusual cutaneous lesions.

References

1 Cao Y, Su X, Wang Q *et al*. A multicentre study evaluating ceftriaxone and benzathine penicillin G as treatment agents for early Syphilis in Jiangsu, China. *Clin. Infect. Dis.* 2017; **65**: 1683–8.

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