- 29 Whitaker RC, Pepe MS, Wright JA, *et al.* Early adiposity rebound and the risk of adult obesity. *Pediatrics* 1998;**101**(3):E5.
- 30 Cole TJ. Children grow and horses race: is the adiposity rebound a critical period for later obesity? *BMC Pediatr* 2004;**4**:6.
- 31 Goran MI. Measurement issues related to studies of childhood obesity: assessment of body composition, body fat distribution, physical activity, and food intake. *Pediatrics* 1998;**101**:505–18.
- 32 Dencker M, Thorsson O, Karlsson MK, *et al.* Daily physical activity related to body fat in children aged 8–11 years. *J Pediatr* 2006;**149**:38–42.
- 33 Welk GJ, Corbin CB, Dale D. Measurement issues in the assessment of physical activity in children. *Res Q Exerc Sport* 2000;**71**(2 Suppl):S59–73.
- 34 Sallis JF, Saelens BE. Assessment of physical activity by self-report: status, limitations, and future directions [erratum appears in *Res Q Exerc Sport* 2000;**71**:409]. *Res Q Exerc Sport* 2000;**71**(2 Suppl):S1–14.
- 35 Van Coevering P, Harnack L, Schmitz K, *et al.* Feasibility of using accelerometers to measure physical activity in young adolescents. *Med Sci Sports Exerc* 2005;**37**:867–71.
- 36 Trost SG, Pate RR, Freedson PS, *et al.* Using objective physical activity measures with youth: how many days of monitoring are needed? *Med Sci Sports Exerc* 2000;**32**:426–31.
- 37 Trost SG, Ward DS, Moorehead SM, *et al.* Validity of the Computer Science and Applications (CSA) activity monitor in children. *Med Sci Sports Exerc* 1998;**30**:629–33.

IMAGES IN PAEDIATRICS

doi: 10.1136/adc.2007.124545

Pyomyositis secondary to chickenpox

Necrotising fasciitis and osteomyelitis are uncommon but life threatening complications of chickenpox, particularly in otherwise healthy infants. These diseases are usually caused by group A β -haemolytic streptococcus (GABHS) and *Staphylococcus aureus*.¹ Presenting clinical features may be continuous or recurrent fevers, localised redness and swelling, refusal to weight bear or shock.

Pyomyositis, also a known complication of chickenpox, is an important differential diagnosis of necrotising fasciitis. It is important to differentiate between the two as urgent surgical exploration can be life saving in the case of necrotising fasciitis, whereas more conservative methods can be used in pyomyositis.²

MRI may be useful in localising the site of infection and differentiating cellulitis from necrotising fasciitis, septic arthritis, pyomyositis and osteomyelitis. It also provides information about the depth and extent of infection and is useful in planning debridement.³

A 6-month-old baby presented with swelling in the right anterior chest and both knees of 4 h duration. She had developed chickenpox 12 days prior to presentation and on admission all skin lesion had healed. A provisional diagnosis of necrotising fasciitis was made following an urgent MRI which showed a lobulated collection adjacent to but not invading the shoulder joint (fig 1). A large collection was also noted along the left femur extending down to the tibia with underlying muscular inflammation, consistent with necrotising fasciitis. Expedient debridement undertaken by the orthopaedic surgeons revealed pus but no necrotic muscle or bony tissue. A diagnosis of pyomyositis was made at this stage.

Dhruv Rastogi, Alka Thakur
Royal London Hospital, London, UK

Correspondence to: Dhruv Rastogi, Royal London Hospital, Whitechapel, London E1 1BB, UK; Dhruv_rastogi@yahoo.com

Competing interests: None.

Parental/guardian informed consent was obtained for publication of the person's details in this report.

Figure 1 MRI of the 6-month-old baby.

References

- 1 Aebi C, Shmed A, Ramilo O. Bacterial complications of primary varicella infection in children. *Clin Infect Dis* 1996;**23**:698–705.
- 2 Clark P, Davidson D, Letts M, *et al.* Necrotising fasciitis secondary to chicken pox infection in children. *Can J Surg* 2003;**46**:9–14.
- 3 Tang WM, Wong JWK, Wong LLS, *et al.* Streptococcal necrotizing myositis: the role of magnetic resonance imaging. *J Bone Joint Surg Am* 2001;**83**:1723–6.