Feverish illness in children: discordance between British, Italian and Swedish clinical guidelines

(Mr.) Inge Axelsson, MD, PhD

Mid Sweden University, Östersund, Sweden inge.axelsson@miun.se

Object and methods

National clinical guidelines (CG) about feverish illness in children have been published in the UK (CG160 from NICE 2013), Sweden (SMI 2013) and Italy (Chiappini, *Clin Ther.* 2009). These three CGs are in part discordant. They were read and will be discussed here. The British, Italian and Swedish CGs are called UK, IT and SE, respectively.

Results

Definition of fever: "an elevation of body temperature above the normal daily variation" (UK). A temperature of 38.0° or higher regardless of method for measurement or time of the day (SE).

Where should fever be measured?: Axilla or tympanic membrane in children aged 0–5 years (UK). In the axilla using a digital thermometer (health staff: tympanic membrane in children ≥4 weeks) (IT). Rectum (all ages) or axilla (<1y) or tympanic membrane (>1y) (SE). **Comment:** practitioners (and parents?) seem to accept the different CGs.

Kawasaki disease (KD): Children with a fever lasting more than 5 days (UK) or 5 days or more (SE) should be assessed for Kawasaki disease. **Comment:** fever persisting 5 days or more is correct. In the presence of ≥4 principal criteria, KD diagnosis can be made on day 4 of illness or earlier. (Newburger, *Pediatrics* 2004)

Meningococcal disease (MD): According to British studies, pain in arm or leg is an early sign to MD but is not mentioned in CG (UK).

Use of antibiotics by the non-pediatric practitioner: do not prescribe antibiotics to children with fever without apparent source. Give parenteral antibiotics to children with suspected MD at the earliest opportunity (UK).

Investigations in infants <3 months with fever: perform lumbar puncture (LP) and give parenteral antibiotics to the following children with fever (UK): infants <1 month; all infants aged 1–3 months who appear unwell or have a white blood cell count (WBC) $<5 \times 10^9$/L or $>15 \times 10^9$/L. **Comment:** LPs, blood cultures, and antibiotics are probably underused for infants <3 months in Sweden (personal experiences of several cases).

Antipyretic interventions: less focus on fighting fever and more on screening for 'toxic' appearance. Parents should consult a physician or nurse before giving antipyretics to infants <6 months. (SE)

Advice for home care: look for sunken fontanelle, dry mouth, sunken eyes, absence of tears, poor overall appearance and non-blanching rash (UK).

Conclusion

The discordances should be considered when the clinical guidelines are updated. New literature searches may be necessary in order to settle controversies.

Funding: Mid Sweden University.

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