

SUPPLEMENTARY METHODS

Case-report form (CRF): Patient information relevant to the infection was recorded on the day of enrolment and after definitive laboratory results on individual anonymized CRFs designed for this study. After history, clinical examination, and initial laboratory results, the Emergency room (ER) doctor was asked to evaluate each patient's probability of having a serious bacterial infection (SBI), referred to as the anticipated risk of SBI in the results. The anonymized CRF information was transferred to a computerized database available exclusively to the study team.

Study specimen collection: Blood specimens were immediately stored at 4°C. Within 24 hours, blood was centrifuged, aliquoted, and plasma was stored at -70°C. Real-time PCR was used for Adenovirus (AdV; qualitative assay with an updated primer reverse 5' GVGCCACGGTGGGGTTTCTAAACTT 3' [limit of detection (LOD) = 2.5 DNA copies per PCR reaction], followed by a quantitative commercial assay [ADENOVIRUS R-gene®, Argene] according to the manufacturer's instructions) [1] and Human herpesvirus type 6 (HHV-6; qualitative assay [2] detecting subtypes A and B [LOD = 9.5 DNA copies per PCR reaction], followed by quantitative commercial assay [Genesig] according to the manufacturer's instructions), whereas quantitative and semi-quantitative real-time reverse-transcription RT-PCR were used for Human enterovirus A-D (HEV; using the previously published Entero/GE/08 assay [3] [LOD = 25 copies per PCR reaction]) and Human parechovirus 1-6 [4] (HPeV; LOD = 75 copies per PCR reaction), respectively. Semi-quantitative results were reported as cycle threshold (CT) values; samples with CT values <40 were considered positive. Quantitative results were reported in copies/ml. (RT)-PCR testing was batched and therefore physicians involved in the care of study patients were blinded for HEV, HPeV, AdV and HHV-6 (RT)-PCR results.

Definitions: Our microbiology laboratory reports quantitative urine culture (<10² to >10⁶ colony-forming units (CFU)/ml). According to the American Academy of Pediatrics, the diagnosis of a urinary tract infection UTI requires a positive urinalysis and ≥10⁵ CFU/ml of a single uropathogenic organism on an appropriately collected specimen[5], whereas results must be evaluated in their clinical context for specimens containing 10⁴–10⁵ CFU/ml[5]. Therefore, UTIs were confirmed in cases of positive urinalysis and ≥10⁵ CFU/ml of a single uropathogenic organism in appropriately collected specimens, regardless of the age. Appropriately collected specimens with 10⁴–10⁵ CFU/ml of a single uropathogenic organism, or two uropathogenic organisms of which one showed ≥10⁵ CFU/ml, were diagnosed as possible UTIs. Bag specimens and appropriately collected specimens with <10⁴ CFU/ml were considered as contaminant.

Additional microbiological analyses: Microbiological analyses not part of the standard fever without a source (FWS) workup, but requested by the ER physician, such as nasopharyngeal swabs (NPS), blood PCR for parvovirus B19, or stool viral antigen or PCR testing, were recorded in the database.

REFERENCES

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[3] Tapparel C, Cordey S, Van Belle S, et al. New molecular detection tools adapted to emerging rhinoviruses and enteroviruses. *J Clin Microbiol* 2009;47(6):1742–9.

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