Cross-Sectional Survey of Viral Testing on Nasopharyngeal Aspirates by Laboratories in the UK – is Targeted Testing the Way Forward?

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Keywords

Background Acute viral bronchiolitis is the most common cause of hospital admissions amongst infants in the UK. The diagnosis is primarily clinical with most infants requiring supportive management. RSV is the main cause and routine confirmation has, until recently, been undertaken via nasopharyngeal swabs or aspirates (NPA). This is no longer recommended by the American Academy of Paediatrics (AAP) with the exception of at risk groups. NICE guidelines confirmed the diagnosis was primarily clinical but didn't explicitly recommend against routine testing.

Methods This study aimed to review the current practice for testing of children admitted with suspected bronchiolitis in hospitals across the UK using a structured questionnaire.

Results In total, 199/209 (95%) laboratories responded. Of these, 140 (70%) performed NPA testing on site with the remainder undertaken elsewhere. Approximately seventy percent [N =99] of trusts performed routine testing on infants with suspected bronchiolitis. Extended viral PCR testing was offered by some trusts (30%) based on either initial negative screening tests, clinical decision making (36.4% [N=51]), or as part of a mandatory protocol (26.6% [37]). Extended viral PCR testing was not offered by 13 trusts (9.3%). Point of care (POC) testing for RSV across the UK was available at 47 hospitals. Apart from POC, 46 laboratories did not perform tests out-of-hours although 8 would if requested by a Consultant Paediatrician.

Conclusion We recommend more consensus based on patient outcomes and cost benefits. Locally, we follow targeted NPA testing only for high risk patients in keeping with the AAP guidance.