to Nursing and Allied Health Literature, British Nursing Index, OVID Emcare, Health Management Information Consortium, PsycINFO and Allied and Complementary Medicine, The Grey Literature was also searched. Selected studies either contained only children and adolescents as study participants, or, if adults were included, the data for adolescents and children must have been presented separately.

Results Seven studies were selected from 104. Three studies compared e-cigarette users with non-users; two of these studies found a positive significant association between coughing and e-cigarette use in adolescence. Two studies looked at whether adolescents attributed symptoms they experienced to their e-cigarette use. One study reported that coughing was the most likely negative symptoms reported by adolescents who use e-cigarettes; the other study found that adolescents, on initiation of e-cigarette use, reported coughing. Two studies looked at the cases of children and adolescents who had presented to hospital after e-cigarette use and found coughing was a common presenting symptom.

Conclusions These studies suggest that children and adolescents who use e-cigarettes are likely to experience increased rates of coughing and there is an association between e-cigarette use and coughing in childhood and adolescents. Clinicians should consider e-cigarette use in teenagers who present with respiratory symptoms without a clear cause. Further research is needed to assess the more long term impact on the health of children and adolescents who use e-cigarettes to gain a more clear picture of the safety profile of e-cigarettes.

Paediatricians with Expertise in Cardiology Special Interest Group

896

PALIVIZUMAB POST-CARDIOPULMONARY BYPASS SURGERY

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10.1136/archdischild-2021-rcpch.268

Background Palivizumab is licensed for use in the prevention of serious lower respiratory tract disease caused by respiratory syncytial virus (RSV) in children under 2 years of age with haemodynamically significant congenital heart disease (CHD). The British National Formulary (BNF) and the American Academy of Pediatrics (AAP) guidelines state that all children on palivizumab should receive an additional dose of palivizumab post-cardiopulmonary bypass (CPB) surgery as serum palivizumab concentrations have been observed to decrease by more than 50% after CPB.

Objectives To compare the number of patients documented as being on a course of palivizumab in a tertiary paediatric cardiac centre receiving the recommended additional dose of palivizumab post-CPB surgery before and after the addition of a 'best practice advisory' alert highlighting the eligible patients on the computer healthcare system EPIC.

Methods **Pre-intervention:** 1. Identify all patients <2 years old who had cardiac surgery over a 9 week period in Nov-Jan 2019/2020 using EPIC. 2. Searching the records of these

patients using the search terms 'rsv', 'palivizumab', 'CPB', 'bypass' to identify the number patients documented as being on a course of palivizumab who had CPB surgery and received a post-bypass dose of palivizumab.

Intervention: Installation of a new alert on EPIC. For all patients who are documented as being on a course of palivizumab and subsequently are documented as having undergone CPB surgery, EPIC generates a patient 'best practice advisory' alert that informs clinician that the child needs a post-bypass dose of palivizumab prescribed.

Post-intervention: 1. Identify all patients <2 years old who had cardiac surgery over a 9 week period in Nov-Jan 2020/2021 using EPIC. 2. Searching the records of these patients using the search terms 'rsv', 'palivizumab', 'CPB', 'bypass' to identify the number patients documented as being on a course of palivizumab who had CPB surgery and received a post-bypass dose of palivizumab.

Results **Pre-intervention:** 8 patients over a 9 week period were documented as being on palivizumab. 12.5% (1/8) of patients received a post-bypass dose of palivizumab in hospital.

Post-intervention: 17 patients over a 9 week period were documented as being on palivizumab. 47% (8/17) of patients received a post-bypass dose of palivizumab in hospital.

Conclusions The addition of a computerized best practice advisory alert has seen an improvement in the number of patients receiving the recommended additional dose of palivizumab post-bypass from 12.5% to 47%.

Discussion Interestingly, the Joint Committee on Vaccination and Immunisation (JCVI) has issued no recommendations on the use of palivizumab post-cardiac bypass surgery. Our current local practice sees all patients who have started a course of palivizumab continue the course until the end of the RSV season, regardless of the outcome of their cardiac surgery. At least 40% of patients in this study, however, had no residual left to right cardiac shunt and no other possible indication for palivizumab raising the question of potential future cost-saving and the need for further, clearer guidelines from international bodies regarding the use of palivizumab in the post-operative cardiac patient.

Child Protection Special Interest Group

897

SUSPECTED NON-ACCIDENTAL INJURIES; WHICH BLOOD TESTS TO DO?

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10.1136/archdischild-2021-rcpch.269

Background The Child Protection Companion outlines an approach to haematological investigations in suspected non-accidental injuries, for children presenting with bruising or bleeding.

Objectives We audited records to see our compliance with the current guidelines.

Methods

- We audited electronic patient records of children referred with suspected non-accidental injuries to our hospital, over a 15-week period in 2019 and in 2020.
- A total of sixty-seven children, thirty in 2020 and thirty-seven in 2019, were referred with NAI concerns.