Alder Hey Children's NHS
NHS Foundation Trust

RSV Prophylaxis: A Nurse Led Programme

Michelle McLaren, Paediatric Cardiac Nurse Specialist

Alder Hey Children's NHS Foundation Trust

Inspired by Children

What is Respiratory Syncytial Virus (RSV)

- RSV causes respiratory tract infections, 75-80% of all LRTI in young children. 1-3% need hospitalisation.
- Peak infection season is November to April.
- If airways are vulnerable this may lead to more serious illness, increased morbidity and mortality. Airways are more vulnerable in younger infants (especially preterm), patients with lung disease and those with significant cardiac disease.
- Tobacco exposure, day care, over-crowding, lack of breastfeeding and admission to hospital during the RSV season can increase risk

How can we protect?

- Prevention of spread – transmitted by contact (hands, objects) and via droplets from the upper airways of people.
- Palivizumab - a humanised monoclonal antibody.
- Palivizumab offers passive immunity – 5 IM injections at monthly intervals starting in week 40 (04/10/21)
- Aims is to reduce hospitalisation rates and serious complications in high-risk children.
- It’s not cheap so strict NHS criteria – Bluteq form required

Who qualifies?

- **1. High risk due to BPD – also known as CLD**
- a) Pre-term infants who have moderate or severe BPD.2 Pre-term infants who have BPD and meet the gestational age and chronological age criteria at the start of the RSV season (<9/12)
- b) Infants with respiratory diseases who are not necessarily pre-term but who remain on oxygen at the start of the RSV season are also considered to be at higher risk. These may include:
  - pulmonary hypoplasia due to congenital diaphragmatic hernia
  - other congenital lung abnormalities3
  - interstitial lung disease

and including those receiving long-term ventilation at the onset of the RSV season.

JCVI advice update October 2020

- Infants born at ≤34+0 weeks gestation; **AND**
- Diagnosed with CLD; AND
- Discharged from hospital on home oxygen on or after 1 January 2020.

- **2. High risk due to CHD**
- a) Pre-term infants with haemodynamically significant, acyanotic CHD who meet certain gestational age and chronological age criteria.
- b) Cyanotic or acyanotic CHD plus significant co-morbidities.
- **3. Children less than 24 months of age with severe combined immunodeficiency disease (SCID).** This is the most severe form of inherited deficiency of immunity, in which children are unable to mount either T-cell responses or produce antibody against infectious agents.

What are acceptable co-morbidities?

The RSV Committee has put together the following list to support commissioning.

1.1 Co-morbidities currently acceptable under the guidance

Co- morbidities at high risk of RSV infection	
Down Syndrome	Preterm delivery (<35 weeks)
Chronic lung disease	Pulmonary hypertension
Immune deficiency- Di George, Combined immuno-deficiency	Heart failure- diuretic therapy, oral inotropic therapy
Cyanosis <85%	Those due transplantation or cardiac surgery

1.2 Co-morbidities **NOT** acceptable under the guidance

Little/no evidence of need of RSV prophylaxis	
Haemodynamically insignificant CHD (on no therapy)	Repaired congenital heart disease
Arrhythmias	Over 2 years old
Recovered from Chronic lung disease	

1. COMMISSIONING FOR PALIVIZUMAB 2016 VACCINATION SEASON: Additional information guidance produced in response to queries raised for circulation via Neonatal Operational Delivery Networks. NHS England. Nov 2016

Examples of children who may qualify

- Single Ventricle children including some post-Cavo
- VSD, CAVSD
- TOF, PA - PDA stent/Sano shunt
- DCM
- Repaired heart but not a "good repair" – PHT, leaky valves
- Exclusions - >2 years old, anti-coagulation therapy, no co-morbidities. IFR can be applied for (@20% success in 2016).

What do we need you to do?

- Identification has to be everyone's responsibility – Cardiology Consultants, Registrars, Cardiac Nurse Specialists, Ward nurses etc.

- Opportunities for identification: ante-natal diagnosis, each cardiology out-patient appointment including peripheral clinics, DGH paediatricians, JCC, in-patient ward rounds incl outliers, calls to 369

- Let Cardiac Nurse Specialists know via group email address and put “Palivizumab” as the subject. Need name, AH or NHS No, diagnosis and Palivizumab qualifying criteria (if in doubt let us know and we can help). Please cc Emma Burns our PCO

- We will do a virtual Palivizumab in-patient ward round weekly to pick up any missed referrals

- Add request for Palivizumab to letters which are cc’d to paediatricians; still let us know please as letters are taking so long to be typed.

What we do

- Run Palivizumab clinic for Liverpool CCG cardiac patients
- Organise, prescribe and administer to cardiac in-patients
- Refer to Palivizumab leads around the region
- Keep a Palivizumab spreadsheet on K drive
- We need your help in identification
- What do you need from us - ? Weekly email reminders/ posters/identifiers taped to clinic desks

Any comments/questions?

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michelle.mclaren@alderhey.nhs.uk

michelle.mclaren@nhs.net

0151 252 5291 –cardiac nurse specialist helpline

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