Helpful Hints to Ensure our Complex Patients Receive Palivizumab

Denied, Again

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Objectives

• Compare the American Academy of Pediatrics and the National Perinatal Association Guidelines for RSV immunoprophylaxis

• Identify reasons that patients are denied for RSV prophylaxis and strategies for optimizing approval

• Summarize Akron Children’s Heart Center’s Quality Improvement goals for the 2019/2020 RSV season
Background

• The recommendations vary from different professional organizations on who should receive RSV prophylaxis, and insurance authorization can be cumbersome.

• The drug is expensive
  – ~$7500 per patient per season
    • A 2011 study out of Austria looked at CHD patients and found that the costs/Quality-Adjusted-Life-Years (an international cost-effectiveness metric) was about $10,000
      (Medicare and Medicare set their “value threshold” at anything < $50,000)
    • Mac, et al, 2018, Pediatrics
      – From a payer perspective, palivizumab was found to be relatively cost-effective in infants with BPD or CLD, **infants with CHD**, term infants from specific remote communities, and preterm infants with and without lung complications.
## Variation in Recommendations

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<tbody>
<tr>
<td>Hemodynamically significant congenital heart disease ≤24 months (chronological age) at the start of RSV season</td>
<td>Hemodynamically significant congenital heart disease &lt; 12 months of age at the start of RSV season</td>
<td>Hemodynamically significant congenital heart disease &lt;24 months of age at the start of RSV season, unless cardiology waiver obtained</td>
<td>Infants ≤12 months with Haemodynamically significant cyanotic or acyanotic disease ≤12 months of age at the start of RSV season 12–24 months, cyanotic or acyanotic, who remain haemodynamically unstable</td>
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*RSV experts from Europe, Canada and Israel, including representatives from European Neonatal, Perinatal and Paediatric Scientific Societies*
Hemodynamically Significant

• What is significant?
  • Congenital heart disease that requires surgical intervention in the first year of life
  • Cyanotic heart disease that has been palliated, but remains high risk
    • Heart failure that requires medical management
    • Pulmonary hypertension
    • Growth failure

• Hemodynamically insignificant
  • Secundum ASD, small VSD, pulmonic stenosis, uncomplicated aortic stenosis, mild coarctation of the aorta, and PDA
Do they need Synagis after surgery?

• Bypass effect
  • Mean concentration decreases by 50%
• Palliation vs. Repair
  • Hemodynamic instability
  • Pulmonary Hypertension
Akron Children’s Quality Improvement Data

- Taking into account the various recommendations, consensus within the Heart Center is that any child with CHD who requires surgery in the first year of life, and those under age 2 with cyanotic CHD who are palliated and remain at risk should receive Palivizumab.
- For the last 3 Palivizumab seasons (16/17, 17/18, 18/19), 103 Heart Center patients were identified as qualifying for Palivizumab because of their cardiac disease on retrospective chart review.
- 24 patients did not receive Palivizumab.
  - 6/24 of these patients +RSV
  - 1 refusal, 1 inpatient
  - 5/79 received Palivizumab +RSV
- 25 patients were delayed in receiving their first dose of Palivizumab.
  - 2 most common delays were lack of identification and insurance issues.
- Overall, 49/103 patients did not receive Palivizumab or were delayed in receiving their first dose.
Better Identification is key

• 2018/2019 Season
  • 5/12 of patients who did not receive Palivizumab were not identified by the cardiologist as candidates
  • 5/11 patients who were delayed in receiving their first dose of Palivizumab were not identified by the cardiologist as candidates

• Overall, 10/23 (43%) patients were either delayed in receiving their first dose, or did not receive Palivizumab at all because they were not identified as candidates
Quality Improvement work

• Consistent recommendations
• Better Identification
• Be proactive and collaborative with primary care providers
  • Submit supporting documentation with initial application
  • Enlist the help of cardiology

I am working on this Palivizumab referral...Can you review this chart and let me know if you think this patient's cardiac condition is acyanotic or cyanotic. I have reviewed all notes and even did some research, but I am still not sure? Thanks.
Together everyone achieves more

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References


