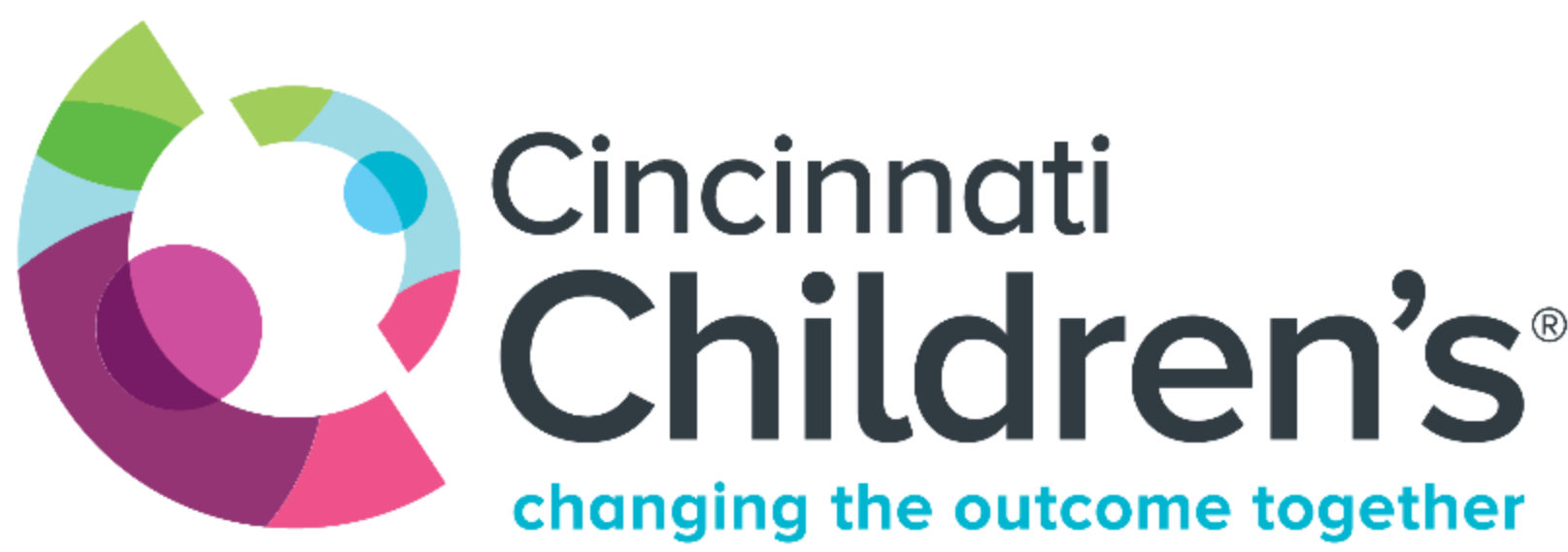


Recombinant angiotensin II therapy in a child with cardiac dysfunction and *Pandoraea* and *Candida* sepsis



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Introduction

- Recombinant angiotensin II (AT-II) is an emerging drug therapy for refractory hypotension in the critical care setting
- Potential responders have disruption of the Renin-Angiotensin-Aldosterone System (RAAS) which can be quantified by serum direct renin levels
- **We present a case of a child that responded to AT-II in the setting of septic shock and right ventricular dysfunction**

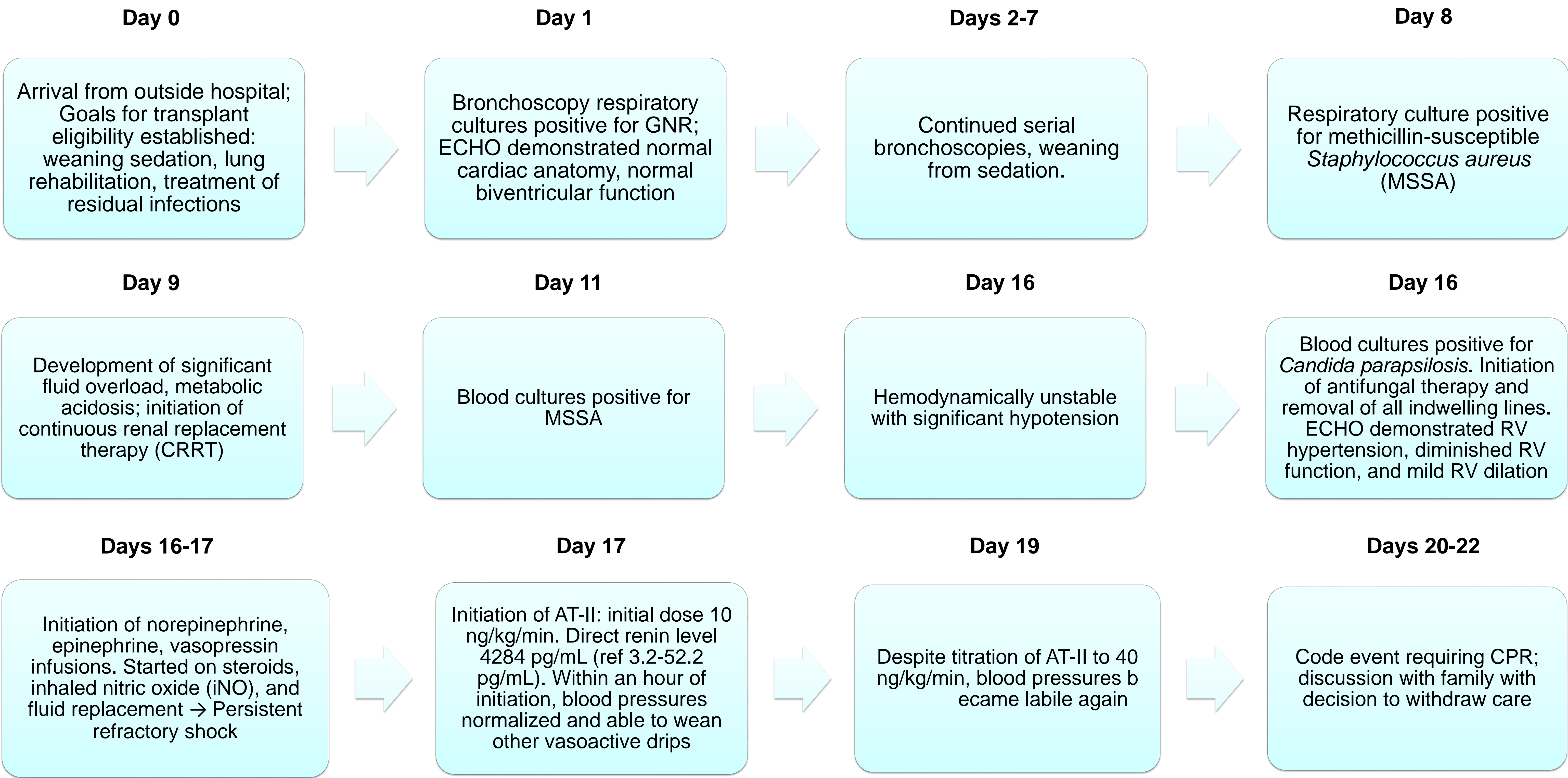
Initial Case Presentation

- A previously healthy 19-month old female initially presented with a febrile respiratory illness
- After a prolonged medical course, she was diagnosed with a bilateral necrotizing pneumonia
- Required veno-venous extracorporeal membrane oxygenation (VV-ECMO) due to the development of pediatric acute respiratory distress syndrome (pARDS)
- Referral was made to our institution for potential for lung transplantation
- Initial infectious work-up was notable for respiratory cultures with *Acinetobacter spp* and gram-negative rods (GNR, *not identifiable*), viral panel positive for adenovirus, and urine cultures positive for *Candida spp*

Discussion

- Bacterial cultures containing GNR were later identified with bioMerieux Vitek MS MALDI-ToF system as *Pandoraea spp*
- *Pandoraea spp* is reported in literature as an infectious agent in patients with cystic fibrosis; **this is the first documented pediatric non-CF patient**
- The patient was identified as a 'responder' to AT-II therapy based on direct renin levels and the response within the first 24 hours of initiation
- In a patient with mixed shock, AT-II is a potentially powerful vasoactive agent in lieu of the common medications used in the PICU/CICU

Timeline



Conclusions/Speculations

- AT-II has also been used in the adult setting after cardiac surgery and cardiopulmonary bypass; there is potential for its use in pediatric cardiac surgeries
- Currently AT-II has been used for refractory hypotension; optimal timing for use and dosing is not fully understood

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