

Heart Failure

March 6, 2019

Dr. Price, an internationally recognized expert in pediatric heart failure and transplant, presents [an exceptional article on heart failure in children](#) in the February issue of Pediatrics in Review.

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Article type: [Pediatrics in Review Blog](#)



Dr. Price, an internationally recognized expert in pediatric heart failure and transplant, presents [an exceptional article on heart failure in children](#) in the February issue of Pediatrics in Review. The updated concepts that he details are important to the primary care provider, to cardiologists who care for children, and to trainees. I would implore your careful reading of this paper. I will offer some commentary, rather than trying to repeat his carefully done text.

For the primary care provider:

We cannot treat what we do not see. It is incumbent upon the primary care physician to recognize that the wheezing, distressed infant with tachypnea and tachycardia has more than bronchiolitis.¹ This can be especially difficult in a busy clinic or emergency room during an RSV epidemic but is rather easily resolved by obtaining a thoracic roentgenogram for the infant with respiratory distress who has presumed RSV bronchiolitis and who is getting clinically worse ([See Fig 1 in Dr. Price's article](#)).

If the infant with heart failure is not recognized, he/she cannot receive care and will likely die. The implication is to “overreact” and obtain a radiographic study rather than to trust your instincts, then to refer on an emergent basis.

For the cardiologist:

Treatment of heart failure in children is an evolving issue. It is incumbent upon clinicians to stay abreast of this literature. As of now, the life-saving use of angiotensin inhibitors has changed the landscape, often allowing heart failure patients to come off transplant lists. As a side note, it is interesting to recall that these medications derived from observations of the effects of banana plantation workers being bitten by a Brazilian pit viper. This important observation led to important research on the renin-angiotensin cycle in Sir John Vane's laboratory, and 25 years later we have these miracle drugs.

Advances in transplant therapy, ventricular assist devices, destination strategies, and pharmacology have further improved patient care and will continue to do so. With the ongoing shortage of donor hearts, it is incumbent upon clinicians to understand and enhance these therapies as far as possible.

For the trainee:

In 1968, Dr. Robert Good performed the world's first bone marrow transplant at the University of Minnesota. I was the resident on the case and can attest to his foresight and brilliance. He always reminded us to pay attention to "experiments in nature." A horrible disease – Duchenne muscular dystrophy – offers such insights regarding heart failure in children. A great deal of information and strategies have emerged from this population and will continue to do so. This offers a fertile arena, among many others (including the emerging young adult population with new morbidities), for young investigators to pursue studies on causes, natural and unnatural histories, genetic implications, and therapeutic options. This is where the future will be brightest for future generations. Consider this a gauntlet thrown down to you. I envy your opportunities to change the future of this population and wish that I could be part of it. Godspeed!

References

1. Franklin WH, Dietrich AM, Hickey RW, Brookens MA. Anomalous left coronary artery masquerading as infantile bronchiolitis. *Pediatric Emergency Care*. 1992 Dec;8(6). 338-41.

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