Top Ten Things To Know
Infective Endocarditis in Childhood: 2015 Update

1. This scientific statement is an update of the 2002 AHA statement “Unique Features of Infective Endocarditis in Childhood.” The epidemiology, diagnosis, laboratory findings, and treatment of infective endocarditis (IE) for infants and children are updated in this statement.

2. IE usually presents with prolonged low-grade fever and various somatic symptoms: fatigue, weakness, arthralgias, myalgias, weight loss, rigors, and diaphoresis.

3. Bacteremia (or fungemia), valvulitis, immunologic responses, and emboli are responsible for the clinical findings of IE.

4. Examples of cardiac complications of IE include congestive heart failure, new or worsening valve dysfunction, periannular infection extension, septic emboli to the coronary arteries, and myocardial dysfunction.

5. In approximately 8% to 10% of pediatric cases IE develops without structural heart disease or any other readily identifiable risk factors.

6. Over the past 20 years, congenital heart disease (CHD) has become the primary underlying condition for IE in children < 2 years of age from developed countries.

7. Common congenital heart defects associated with IE include aortic valve abnormalities, central septal defect, and tetralogy of Fallot. Many children with IE have had surgery for complex cyanotic CHD.

8. Congestive heart failure, progressive valve dysfunction and emboli are often reasons for surgery. Clinical situations with a high risk for IE complications that may require surgery include the following: prosthetic cardiac valves, left-sided IE, Staphylococcus aureus IE, fungal IE, previous IE, prolonged symptoms of cyanotic CHD, systemic-to-pulmonary shunts, and poor clinical response to antimicrobial therapy.

9. When IE develops in children without CHD, it is often associated with indwelling venous catheters.

10. For stable, low complication--risk patients, home intravenous treatment is becoming an accepted approach.