Pediatric Cardiology Evaluation of Chest Pain - Are We Meeting Pediatricians’ Expectations?

ACC Moderated Poster Contributions
McCormick Place South, Hall A
Sunday, March 25, 2012, 11:00 a.m.-Noon

Session Title: Congenital Cardiology Solutions: It’s Not All Congenital
Abstract Category: 27. Congenital Cardiology Solutions: Pediatric
Presentation Number: 1138-230

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Background: Pediatric chest pain is a frequent concern leading to pediatric cardiology evaluation. We sought to understand pediatricians’ referral patterns and expectations for pediatric cardiology consultation.

Methods: We surveyed pediatricians, who are members of an independent alliance of private practices in the metropolitan Atlanta region, to 1) assess referral patterns for chest pain (identified by ICD-9 codes) and 2) determine expectations for evaluation of chest pain upon referral to a pediatric cardiologist. We compared pediatricians’ expectations to the observed practice at our institution using Pearson chi-square test.

Results: In all, 84 pediatricians from 26 of 38 (68%) practices responded. In 2010, these practices referred 36% (482/1308) of their patients with chest pain for outpatient consultation. Among the pediatricians surveyed, 33% are very comfortable and 57% somewhat comfortable in managing chest pain. Prior to referral, pediatricians ordered the following tests: Chest radiographs 45% (217/482), ECG 13% (62/482), and laboratories 12% (57/482). Concerns leading to referral, from most to least concerning, were: risk for sudden cardiac death, undiagnosed congenital heart disease, sports clearance, parental anxiety, and medical-legal concerns. Of responding pediatricians, 77% indicated that a complete history, physical exam, and electrocardiogram (without further testing) by a pediatric cardiologist are sufficient to evaluate a patient with chest pain. These components comprised the complete evaluation in 42% of the 1483 unique initial consultations for chest pain at our institution in 2010 (P<0.0001). This expectation of the pediatrician did not vary by number of years in practice (P=0.71). Despite these differences, 93% of pediatricians responded that they were very satisfied with the pediatric cardiology evaluation for chest pain.

Conclusions: Chest pain is a common reason for referral to a pediatric cardiologist. Pediatricians have varying levels of comfort and expectations in managing chest pain. Standardized evaluations to maximize appropriate resource utilization while satisfactorily addressing pediatricians’ concerns are needed.