

CARDIAC FUNCTION AND HEART FAILURE

CHANGES IN THE TYPE OF CARDIAC AMYLOIDOSIS DIAGNOSED AT A TERTIARY REFERRAL CENTER: ONE IMPACT OF AN AGING POPULATION

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F
Sunday, April 03, 2011, 3:30 p.m.-4:45 p.m.

Session Title: Biomarkers and Clinical Outcomes
Abstract Category: 20. Myocardial Function/Heart Failure—Basic/Molecular
Session-Poster Board Number: 1051-21

Authors: *Mathew S. Maurer, Farhana Latif, Susan Delisle, Stephen Helmke, Sergio Teruya, Taslima Bhuiyan, Say Salomon, Center for Advanced Cardiac Care, New York, NY, Clinical Cardiovascular Research Laboratory for the Elderly - Columbia University Medical Center, New York, NY*

Background: Cardiac amyloidosis may result from two different precursor proteins: light chain disease from plasma cell dyscrasia (AL amyloid) and transthyretin (prealbumin). The later may be mutant (ATTRmt) or wild type (ATTRwt), formerly senile cardiac amyloid. AL amyloid may be rare in comparison to the ATTR amyloidoses but is more commonly diagnosed since it progresses more rapidly. We asked whether with aging populations, there would be a change in diagnosis patterns.

Methods: Patients from 2000 to 2010 who had an endomyocardial biopsy confirming cardiac amyloid at our institution underwent tissue typing by immuno-histochemistry or mass spectroscopy to confirm Amyloidosis type. Using demographic, clinical and echocardiographic features of subjects with different forms of cardiac amyloidosis we compared changes in diagnosis over time.

Results: Of the 125 patients, 78 (62.5%) had AL, 23 (18%) had ATTRmt and 23 (18%) had ATTRwt cardiac amyloidosis. Those with ATTRwt were older, mostly male with increased LV wall thickness compared to either AL or ATTRmt. Examined in three year intervals, patients diagnosed with ATTR compared to AL amyloid increased over time.

Conclusions: Our single center experience demonstrates that diagnosis of cardiac amyloidosis is changing - more than half diagnosed recently have the ATTR type. This is likely the result of heightened suspicion for the disease, better diagnostic techniques and a reflection of the true prevalence of these different forms of cardiac amyloidosis.

Change in Diagnosis of Cardiac Amyloid in the Last Decade

