60th Annual Scientific Session & Expo

GENERAL CARDIOLOGY: HYPERTENSION, PREVENTION AND LIPIDS

ATTRIBUTABLE RISK ESTIMATE OF SEVERE PSORIASIS ON MAJOR CARDIOVASCULAR EVENTS

ACC Oral Contributions
Ernest N. Morial Convention Center, Room 243
Monday, April 04, 2011, 8:45 a.m.-9:00 a.m.

Session Title: Identifying and Reducing Cardiovascular Risk: An Update 2011
Abstract Category: 17. Risk Reduction and Rehabilitation
Presentation Number: 907-6

Authors: Nehal N. Mehta FAHA, Rebecca Pinnelas, Parasuram Krishnamoorthy, Yiding Yu, Daniel Shin, Andrea Troxel, Joel M. Gelfand, University of Pennsylvania School of Medicine, Philadelphia, PA

Background: Psoriasis is a common inflammatory T helper cell-1/17 mediated skin disease, and if severe, may be a risk factor for cardiovascular (CV) disease. However, the degree to which psoriasis is associated with major adverse cardiac events (MACE) has not been defined. Therefore, we sought to estimate the attributable risk (AR) psoriasis confers on MACE by utilizing the General Practice Research Database (GPRD).

Methods: We performed a cohort study in the GPRD. Severe psoriasis was defined as receiving a psoriasis diagnosis and systemic therapy (N=3,603). Up to 4 patients without psoriasis were selected from the same practices and start dates for each patient with psoriasis (N=14,330).

Results: Severe psoriasis was a risk factor for MACE (HR 1.53; 95% CI 1.26, 1.85, Table 1) in a fully adjusted model. Excess AR of psoriasis on MACE was estimated to be 6.2% based on the baseline incidence rate of MACE (0.0115902 events per year) in the population and the adjusted hazard ratio of psoriasis (1.53) on 10-year MACE.

Conclusions: Patients with severe psoriasis have a 53% increased incidence of MACE compared to the general population. Furthermore, psoriasis confers an additional 10-year risk of 6.2% on MACE. This estimate may warrant aggressive strategies for treatment of CV risk factors in patients with severe psoriasis.

Table 1: Unadjusted and Adjusted Cox Proportional Hazard Regression Models of the Risk of MACE in Severe Psoriasis Compared with Unexposed Patients

Covariate	Hazard Ratio (95% CI) (n= 17,933)
Unadjusted Analysis	
Psoriasis	1.43 (1.22, 1.67)
Primary Adjusted Model	
Psoriasis	1.53 (1.26, 1.85)
Age per year	1.09 (1.08, 1.10)
Sex (Male)	1.75 (1.47, 2.08)
Hypertension	1.27 (1.05, 1.54)
Hyperlipidemia	1.30 (0.86, 1.96)
History of diabetes	2.45 (1.86, 3.24)
Smoking (current vs. never)	1.26 (0.92, 1.72)
Smoking (former vs. never)	1.68 (1.32, 2.14)

Abbreviations: CI, confidence interval.