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EPIDEMIOLOGY, BIG DATA AND PRECISION MEDICINE

SESSION TITLE: EPIDEMIOLOGY OF INFLAMMATORY, INFILTRATIVE AND LATROGENIC CARDIOVASCULAR CONDITIONS

Abstract 13627: Real-World Clinical Characteristics and Recurrence Burden of Patients Diagnosed With Recurrent Pericarditis in the United States

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Abstract

Introduction: Real-world data describing acute pericarditis (AP) etiology in the United States are limited. Information on characteristics of recurrent pericarditis (RP) patients (pts) are also sparse. To fill this gap, our study assesses longitudinal data from a nationwide privately-insured population.

Methods: OptumHealth Reporting and Insights employer claims data (1/2007-3/2017) were used. AP pts were identified and categorized as idiopathic or non-idiopathic etiology based on presence or absence of attributable conditions. Among idiopathic AP pts, a subgroup of RP pts was identified. Recurrence was defined as ≥ 2 AP events separated by >4 weeks. First recurrence date marked the index date. Pts aged ≥ 18 years with ≥ 12 months of continuous enrollment pre-index were included.

Results: Of 17,168 AP pts, 4,175 (24.3%) had non-idiopathic and 12,993 (75.7%) had idiopathic etiology (Table 1). Application of inclusion criteria left 8,822 idiopathic AP pts, of whom 1,604 (18.2%) had ≥ 1 recurrence during a mean observation period of 29 months. Idiopathic RP pts were aged 50.7 years (mean), 51.6% female, and had history of: hypertension (42.3%), coronary artery disease (23.8%), hypercholesterolemia (11.7%), and prior MI (7.3%). Mean (\pm SD) time from initial AP diagnosis to first recurrence was 8.7 (± 12.1) months and mean (\pm SD) number of recurrences was 1.7 (± 1.3) per pt. In idiopathic RP pts with ≥ 4 years of follow-up after the initial AP diagnosis (N=512), 35.9% had ≥ 2 , 18.2% had ≥ 3 , and 9.8% had ≥ 4 recurrences within 4 years.

Conclusions: Use of claims data to infer etiology is a limitation that may explain lower rates of idiopathic etiology vs. prior studies. Nevertheless, high rates of cardiovascular disease and persistent recurrences

suggest a subset of pts with significant clinical burden.

Table 1. Distribution of Disease Etiology in Pts with Acute Pericarditis

	N=17,168
Idiopathic, n (%)	12,993 (75.7)
Non-idiopathic,^{1,2} n (%)	4,175 (24.3)
Metastatic neoplasm	1,141 (6.6)
Autoimmune	1,109 (6.5)
Cardiac syndromes or procedures	853 (5.0)
Metabolic	361 (2.1)
Bacterial	360 (2.1)
Traumatic	298 (1.7)
Fungal	235 (1.4)
Parasitic	7 (0.0)
Other ³	229 (1.3)

Notes:

1. Pts may have more than one condition related to non-idiopathic pericarditis.
2. Etiology was attributed within 90 days of the initial diagnosis except for traumatic and cardiac syndromes or procedures in which a period of 30 days was used.
3. Includes pts with a non-specific non-idiopathic diagnosis.

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