Exertional syncope in with college varsity athletes
Chad Gier¹ MD, Kayle Shapero¹ MD PhD, Stephanie Arlis-Mayor² MD, and Rachel Lampert¹ MD
¹ Yale School of Medicine, New Haven, CT, ² Yale University Health Services/Athletic Medicine, New Haven, CT

Methods

Background

- A small number of studies including a small number of patients suggest that syncope during exertion is associated with increased risk of cardiac disease [1-3].

Objectives:

1. Describe the underlying etiology of athletes presenting with exertional syncope at a single Division I University
2. Describe the diagnostic evaluation of athletes presenting with exertional syncope

Methods

- Retrospective medical record review
- Patients records were reviewed if they met the following inclusion criteria:
  1. Age 17 to 26
  2. Identified as a varsity athlete based on an encounter with a Yale University Sports Medicine physician at Yale Health.
  3. Any medical encounter with associated ICD-9 or ICD-10 code related to syncope from Jan 2011 to Jan 2019.

Results: Etiologies/Activities

- 194 charts reviewed
- 147 no event 4 non-athletes 1 no documentation
- 19 during exertion
  - 13 presyncope
  - 6 syncope
- 27 related to exertion
  - 8 post-exertion
  - 13 presyncope
  - 6 syncope

Results: Diagnostic Evaluation

- ACTIVITY AT TIME OF EVENT
- ETIOLOGIES

Conclusions

- Underlying cardiac disease is uncommon in college varsity athletes that present with exertion-related syncope.
- However, as exertion-related syncope can be a precursor to sudden cardiac death, it is important to rule out potentially dangerous etiologies.
- Larger studies are needed to define the incidence of cardiac disease and to evaluate the optimal work up for athletes presenting with exertion-related syncope.

References


Contact: chad.gier@yale.edu