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Please copy and distribute to ALL physicians at your location.

Cluster of Acute Non-Ischemic Cardiomyopathy Cases

Ventura County Public Health is investigating reports of nine cases of severe, acute, non-ischemic cardiomyopathy resulting in ICU admission, and in one of these cases, death. These cases may or may not have a recent or remote history of influenza-like illness, fever, or gastro-intestinal illness.

At this time, no etiologic agent or common source exposure has been identified. The Ventura County Department of Public Health is working closely with the State Health Department and the Centers for Diseases Control as it explores this cluster of cardiomyopathy cases. While this cluster of cases is composed of seriously ill patients, many of whom were admitted to Intensive Care Units, there is no evidence that it is highly transmissible. The Health Department is following all contacts of these cases and there has not been any hospital employee, family member or friend who has developed a serious illness. Routine precautions only, apropos a suspected patient's symptoms, are appropriate.

We ask that you report cases immediately to the Communicable Disease Office of Ventura County Public Health (Phone: 805-981-5201, Fax: 805-981-5200).

Case Characteristics

Patients with cardiomyopathy that is **not** attributable to an ischemic event.

Those with prior history of the following **should not** be reported:

- History of prior cardiomegaly or congestive heart failure
- Focal wall motion abnormality
- Acute ST elevation myocardial infarction
- Other evidence to suggest the cardiomyopathy is attributable to an ischemic event

Case Definition

Pre-mortem

Ejection fraction of less than 50% AND diffuse generalized cardiac enlargement on echocardiogram

Post-mortem

On post-mortem examination, cardiomegaly* OR left ventricular dilatation, with or without histopathology consistent with myocarditis. There can be no evidence of amyloid, iron or granulomas.

*Some patients with cardiomyopathy have very little cardiac enlargement found post-mortem. When this is the case in a patient diagnosed with cardiomyopathy while still alive, the clinical diagnosis takes precedence over the post-mortem findings.

Case Work-up

Diagnostic and laboratory testing included in the case work-up is essential in determining whether the patient meets the case definition and will contribute to determining the etiology of this cluster of cases. The earlier and more acute the case at the time the specimens are taken, the better. Diagnostic and laboratory testing are as follows:

For your own hospital:

- Troponin
- BNP (brain natriuretic protein)
- Blood culture
- Whole blood for lead
- Urine for arsenic
- Echocardiogram for ejection fraction

For Ventura County Public Health Laboratory:

- Acute serum, 5 ml. (and another 5 ml. convalescent serum at least 10 days after the acute)
- In viral holding medium:
 - NP Swab
 - Throat Swab
 - Endotracheal aspirate (if available)
- Feces in sterile container