Pericarditis in Children and Young Adults: A Monocentric Study

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BACKGROUND

Pericarditis is an acute inflammation of the pericardium with or without pericardial effusion. Pericarditis in children accounts for 5% of pediatric presentations to emergency departments for chest pain¹. Male gender and age between 16 to 65 increase the risk with a RR 2.02².

USA data documented that idiopathic and viral etiologies are more common in males (71%) at a mean age 14.5 years². Diagnosis in children requires the same criteria as in adults: chest pain, pericardial rubs, ECG changes with new widespread ST elevation or PR depression, pericardial effusion. Additional signs and symptoms may be present according to the underlying disease³. Scarce data are available in literature about the etiology in pediatric age.

AIM

To evaluate etiology, features at the onset, and treatment of pericarditis in our population.

METHOD

Monocentric retrospective study of patients diagnosed with pericarditis between January 2013 and December 2017. Diagnosis was made according to 2015 ESC Guidelines³.

RESULTS

We included 120 patients [mean age 10 years, 74 males]. 65 (54%) underwent heart or thoracic surgery in the previous month, 22 (18%) had suffered from an upper respiratory tract infection 2 to 3 weeks earlier, 18 (15%) were diagnosed with idiopathic pericarditis [more often ($p < 0.01$) among patients aged 18 to 23]. 37 (31%) reported chest pain, 25 (21%) fever.

Etiology

Therapy

Clinical signs and radiology findings

CONCLUSION

In our cohort, idiopathic and post-infective etiologies accounted for 30%, the prevalence of the idiopathic being significantly higher in the age group of 18 to 23. Chest pain and fever were the most frequent symptoms at the onset.

SOURCES

- 1: Imazio M. Contemporary management of pericardial diseases. *Curr Opin Cardiol* 2012; 27:308–317.
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- 3: 2015 ESC Guidelines for the diagnosis and management of pericardial diseases. The Task Force for the Diagnosis and Management of Pericardial Diseases of the European Society of Cardiology (ESC); *European Heart Journal* (2015) 36, 2921-2964.