

## Editorial

### Ischemic cardiomyopathy

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In defining the cardiomyopathies, disease of heart muscle due to ischemia is usually not included. Indeed, the term cardiomyopathy is not used when coronary arterial disease and myocardial ischemia are present.<sup>1-3</sup> However, the degenerative changes of the myocardium due to inadequate blood supply comprise a true myopathy. They often result in a dilated heart with a protodiastolic gallop rhythm, tachycardia, and the symptoms and signs of intractable congestive heart failure among the other clinical manifestations of the cardiomyopathies. The large dilated heart can be demonstrated roentgenographically and the electrocardiogram can reveal many abnormalities due to myocardial degenerative phenomena. The prognosis is grave and the poor response to therapy and other aspects of management is much the same as with the other cardiomyopathies. The entity, therefore, of ischemic cardiomyopathy should be accepted and recognized in view of the vast similarities to the other cardiomyopathies.

Ischemic cardiomyopathy is a common and interesting entity. Although typically a disease of older people with arteriosclerotic disease of the coronary arteries,

it does occur in younger people. The etiology is primarily coronary artery disease with the associated impairment of blood flow to the myocardium. Other causes include difficulty in oxygen-hemoglobin disassociation, metabolic diseases, hypertension, etc. The natural history of ischemic cardiomyopathy is fairly typical. The onset is usually associated with angina pectoris of increasing severity and gradual cardiac enlargement, with or without the development of one or more myocardial infarctions with scar formation. However, one may see a patient in the final stages of heart failure due to ischemic cardiomyopathy from whom no historical clue can be extracted as to the precise etiology of his disease. The rate of development and the extent of damage vary among patients. The clinical course may be modified by the elegance of management and the thoroughness with which the patient follows his therapeutic regimen.

The management of ischemic cardiomyopathy, in general, is that for any other type of cardiomyopathy but includes management of the coronary artery and other associated diseases and the associated impairment of myocardial blood flow. In

addition, attempts must be made to reduce the work load placed on the weak or failing pump due to the muscle disease. Cardiologists who have been in practice for many years have not only observed ischemic cardiomyopathy develop but have been impressed with the many exciting and challenging problems it offers. Early recognition of coronary artery disease is important so that vigorous and prompt introduction of all measures available can be instituted to improve the coronary circulation and prevent the development of muscle damage or ischemic cardiomyopathy. With full cooperation of the patient and his family, much can be done for the prevention, delay of development, and treatment of this disease entity.

With careful consideration of the cardiac disease due to coronary artery disease, it becomes evident that ischemic cardiomyopathy is a true cardiomyopathy with a broad spectrum of pathophysiologic and clinical manifestations. The similarities to

the other cardiomyopathies, such as idiopathic cardiomyopathy, are readily recognized. Thus, myocardial ischemia, one of the most common disease states of man, should be included among other etiologic factors in the production of cardiomyopathies. Ischemic cardiomyopathy is the most common type of cardiomyopathy in Europe and the United States. Remember, principles in diagnosis and treatment indicated in other types of cardiomyopathy should be seriously considered in the management of ischemic cardiomyopathy.

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