COMMENTS ON PRE-INFARCTION SYNDROME

By J. Willis Hurst

The indication for aorto-coronary bypass graft in the United States is not a settled issue. We do not know the precise answer to the question because we do not know the natural history of coronary atherosclerotic heart disease; clinical taxonomy has been poorly defined; coronary arteriography is associated with varying mortality and morbidity rates depending on the expertise of the individual performing the test, and the operative morbidity and mortality varies with the surgical team performing the operation. The majority of physicians, I believe, would recommend the procedure for a patient who, despite good medical management, has disabling angina pectoris but has good cardiac function. Whereas the procedure can be done at any age, the patient under 65 is preferred. The problem then becomes one of carefully defining disabling angina pectoris.

The problem we all face in our patients with pre-infarction syndrome is twofold. First we must define our terms since much confusion has been created by the terms currently employed. Many use the term angina pectoris without qualification and the term myocardial infarction where electrocardiographic signs are extensive and enzyme changes are present. I agree with Dr. Sloman that the term pre-infarction syndrome is unsatisfactory. I currently include initial angina pectoris; increasing angina pectoris; angina decubitus and "coronary insufficiency" as being sub-sets within the syndrome known as pre-infarction syndrome. These clinical states are all different to stable angina pectoris. The term "coronary insufficiency" is a poor term since all of the clinical syndromes related to coronary insufficiency are in reality coronary insufficiency. It would be far better to describe such an episode as "substernal distress" of 40 minutes duration with minimal ST-T changes in the electrocardiogram. In other words, it is more appropriate to describe exactly what one knows to be present.

The second problem we face is the therapeutic approach to such patients. In this respect I agree completely with Dr. Sloman. The pre-infarction syndrome as described above is now being studied by some of the MKRU groups (Myocardial Infarction Research Units) in the United States since the information required to give a definite answer regarding surgical intervention for the "pre-infarction syndrome" is not yet available. At present I recommend aorto-coronary bypass for these individuals with the variety of "pre-infarction syndrome" characterized by recurrent chest pain which occurs over a period of many days despite medical management. As a rule, such patients have many episodes of chest pain during the day and night continuing from four to seven days. Some of these patients reveal the Printz metal ST-T wave response in the electrocardiogram during an episode of pain. To restate—Dr. Sloman is correct. We need more information regarding the "pre-infarction" syndrome.

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MOBILE CORONARY CARE UNIT

By J. F. Pantridge

Hospital Coronary Care Units cannot affect significantly the mortality from acute myocardial infarction since the majority of deaths occur early and before hospital admission. Experience with a Mobile Coronary Care Unit over more than 6 years indicates that the median delay between the onset of symptoms and the initiation of intensive care may be reduced from 8 hours to 1 hour 40 minutes. The earlier the patient is seen the higher the incidence of dysrhythmia, particularly bradyarrhythmia. Autonomic disturbance is almost invariable immediately after the onset of acute infarction. In pre-hospital management attention is directed to the relief of pain and the correction of autonomic disturbance by Atropine or Practolol or both. Lignocaine is relatively ineffective in the control of very early ventricular dysrhythmias.

The operation of a Mobile Coronary Care Unit influences the mortality from acute infarction in several ways.

1. It makes possible resuscitation from ventricular fibrillation outside hospital.
2. Ventricular fibrillation may be prevented by correction of the autonomic disturbance. Thus deaths during transport are avoided.
3. The early initiation of intensive care may prevent extension of the area of infarction and diminish the incidence of shock and pump failure.

Pre-hospital coronary care may be integrated into the existing medical system and criticism based on the cost involved is invalid.

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