THE RISING TREND OF MYOCARDIAL INFARCTION IN YOUNG PATIENTS IN PAKISTAN

Although myocardial infarction (MI) is an uncommon entity in young patients, it constitutes a significant health problem due to its devastating effect on the active lifestyle of young patients. In addition, these patients have different risk factors, clinical presentations and prognoses as compared to older patients. The frequency of MI in younger subjects is normally low; however, over the years, a rising trend has been observed in the number of young patients presenting with MI.⁽¹⁾ Most cases of chest pain are misdiagnosed and patients present late into the hospitals with variable presentations.⁽²⁾

As opposed to what was previously thought, adolescent patients with MI do not have a significantly high prevalence of normal coronaries in comparison to older patients; perhaps, the severity of coronary artery disease is comparable in both the young and old populations.⁽³⁾

The most important behavioural risk factors that have been reported include unhealthy diet,⁽⁴⁾ physical inactivity⁽⁴⁾ and tobacco use.⁽⁵⁾ Other causes such as globalisation, urbanisation, poverty, low income, low level of education, overwork and stress are a reflection of the major forces driving social, economic and cultural change.⁽⁴⁾ Among other risk factors, disproportionate ghee intake, limited vegetable intake and overcooking of vegetables have also been reported to play a vital role in the development of MI, especially in our setting.⁽⁶⁾

The most alarming risk factor observed in our population is the rising incidence of smoking in young adults; it was observed that the vast majority of young adults who suffered from coronary heart disease smoked more than 20 cigarettes per day. Smoking is uniformly the most common risk factor in young patients with MI, with variations ranging from 63% to 79% in different studies. (1,4,6) We believe that strict legislation should be passed against advertising cigarettes to this vulnerable population and nationwide campaigns should create awareness regarding the hazards of smoking. (5) Increased physical activity in the form of walking and jogging, avoiding fatty foods and supplementing with vegetables may also help. (4,6) Vegetables is known to provide the required folic acid.

An elevated plasma homocysteine level, hypovitaminosis D, hypovitaminosis E, pregnancy and the consumption of processed meat may also be contributing risk factors leading to MI in young; however, they are not as common in our society and may require limited attention.⁽⁵⁾

Yours sincerely,

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