BEFORE THE RACE...

EXERCISE IS ONE OF THE MANY WAYS TO MAINTAIN a healthy physique. However this activity may be harmful to our body if it is not performed correctly. Some of the common injuries such as muscles or tendon tear or strain on the bones may recover with time. However, there can be also fatal cases where the body is unable to keep up with the stress, resulting in cardiac arrest. Sudden cardiac death has been reported such as after or during a marathon event. Sudden cardiac death can be attributed to many factors. One of the most common causes is underlying coronary artery diseases. These heart attacks are brought on by the combination of intense physical stress of running for an extended duration and pre-existing disease in the runner's heart or lack of cardiac fitness to run the race. This type of death typically occurs in runners aged 35 and above. It can occur even in shorter races such as half marathons. Coronary artery deaths may also occur if the race is conducted under hot and humid conditions, which places additional stress on the heart as it struggles to cool the body. The risk of sudden death also increase when the blood sodium is low or the runner is suffering from heat related illness such as heat stroke.

To fully understand one's condition, the participant should seek specialist's advice prior any strenuous sporting activity. Specialists such as certified sport Cardiologists, Sports Physicians are able to assess one's eligibility prior to the races. Athletes will be evaluated based on their age, heart condition and the nature of activity. Those who exercise regularly have less chances of contracting heart disease and a reduced risk of primary cardiac arrest.

In a sport cardiology screening, the specialist will conduct tests to detect and exclude these cardiac disorders. By individualised comprehensive screening, we hope to identify possible underlying cardiovascular predispositions and lower the risk of sudden cardiac death. A comprehensive test includes a detailed complete personal and family history and physical examination. This can to be conducted before the training and commencement of activity or competition. The specialist may also conduct cardiac tests such as 12 lead Electrocardiogram (ECG), echocardiography (ultrasound of the heart) or exercise testing to ensure the athlete is fit to enroll in the race.

ECG is recommended as part of a routine evaluation for all athletes above the age of 40. This may help to detect certain less common diseases predisposing to sudden death in atheletes such as hypertrophic cardiomyopathy, long QT syndrome, Brugada syndrome, Wolff-Parkinson-White and arrhythmogenic right ventricular cardiomyopathy.

Non-professional athletes who do not require systematic training , who are not expected to perform under pressure should also be mindful of their capability at all times. One should listen to their body and rest when needed.

Apart from a proper sport cardiology screening, athletes should have adequate training, rest and drink sufficient water before the race. We should never overestimate our endurance level as this can lead to very fatal consequences. No individual should rely on completion of a marathon as a demonstration of their lifetime fitness level. On the contrary, participants should improve on their fitness level prior to the race. Proper training, self discipline should be instilled to regulate the body. In order to achieve optimal results, there should be proper diet consisting of proteins, carbohydrates and fats. Through a multidisciplinary approach, one can take part safely , enjoy a race and truly benefit from it. ■

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