

ECGs predict outcome in acute coronary syndrome

Electrocardiograms (ECGs) are very useful in sorting out risk in patients presenting with acute coronary syndromes. But although ECGs are routinely obtained for such patients, their precise prognostic value has not been shown.

Now investigators have correlated initial ECG results and outcome in 12 142 patients with signs of acute myocardial ischaemia enrolled in GUSTO-IIb (Global Use of Strategies To Open Occluded Arteries in Acute Coronary Syndromes trial).

The rate of death or reinfarction at 30 days and 6 months, respectively, was: 5.5% and 8.1% among patients with T-wave inversion; 9.4% and 12.3% among those with ST-segment elevation; 10.6% and 15.4% among patients with ST-segment depression; and 12.4% and 15.7% among those with a combination of ST-segment elevation and depression (*JAMA* 1999; 281: 707-13).

Increased creatine-kinase activity at the time of admission gave additional prognostic information, but many patients who developed an acute myocardial infarction did not have

high creatine-kinase activity initially.

The findings highlight the fact that, despite the use of state-of-the-art treatments—eg, aspirin, thrombolytic agents, thrombin inhibitors, and revascularisation procedures—many patients with acute coronary syndromes remain at high risk for a poor outcome.



Tracing the outcome

In their analysis, the investigators, led by Stefano Savonitto (Ospedale Niguarda Cà Granda, Milan, Italy), emphasise the poor outcome among patients with ST-segment depression, perhaps a reflection of a high rate of severe coronary disease and left ventricular dysfunction in this group. Despite fewer early events, these patients had an even worse long-term prognosis than patients with ST-segment elevation.

N A Mark Estes and Deeb N Salem (Boston, MA, USA) note in an editorial that the ECG “remains the single immediately available and universally used diagnostic test on which the critical decision to attempt to restore blood flow to the jeopardized myocardium is based”.

Larry Husten

Influenza kills at least 240 people in Japan

Japanese authorities are counting the costs of an influenza outbreak that has killed at least 240 people so far this winter. The Tokyo Health Department said on Feb 10 that 39 000 people nationwide had been admitted to hospital, 11 000 more than by the same time last year. The epidemic is on course to surpass last year's record 1.27 million reported 'flu cases, said Reuters news service.

Of the 244 people who had died of 'flu as of Feb 15, 150 were senior citizens and 33 were younger than 16 years old, reported the Tokyo *Shimbu* newspaper. According to the Health and Welfare Ministry, 117 000 people under the age of 20 have been treated for influenza. At the peak of the outbreak in the last week of January, classes were cancelled in 1485 schools because of 'flu-related absenteeism.

Although the number of

deaths is far lower than the 1244 'flu-related fatalities in 1995—the deadliest outbreak in recent times—the media have criticised the authorities for the lack of respirators at hospitals and poor supervision of nursing homes, where the virus has been most deadly. 19 deaths in less than a month at the Tado Psychiatric Hospital, Mie Prefecture, have been a particular cause for concern.

Jonathan Watts

1999-2000 'flu vaccine strains

On Feb 17, WHO announced that the 'flu vaccine for the northern hemisphere for the 1999-2000 season should contain:

- an A/Sydney/5/97 (H3N2)-like virus;
- an A/Beijing/262/95 (H1N1)-like virus;
- either a B/Beijing/184/93-like virus or a B/Shangdong/7/97-like virus—choice should be made on the basis of local epidemiological data. Jane Bradbury

Are cannabis and psychosis linked?

Wayne Hall, executive director of National Drug and Alcohol Studies at the University of New South Wales, Sydney, Australia, has re-kindled the argument about whether heavy use of cannabis can cause “cannabis psychosis”, and whether the use of cannabis can precipitate schizophrenia or exacerbate its symptoms.

At the inaugural international conference on cannabis and psychosis (Melbourne, Feb 16-17), Hall enlisted support for the “cannabis psychosis” hypothesis. Apparent precipitation of acute psychotic symptoms by heavy use of cannabis remit after abstinence, he noted. But are these symptoms a “toxic psychosis” induced by cannabis, rather than a functional psychosis, he asked? It is also possible, he added, that concurrent use of amphetamines could cause a toxic psychosis, mistakenly attributed to cannabis alone.

“If cannabis-induced psychoses exist, it seems that they would require very high doses of THC [tetrahydrocannabinol], the prolonged use of highly potent forms of cannabis, or a pre-existing vulnerability”, Hall suggested. Cannabis might have a causal link with psychosis in vulnerable people [eg, adolescents and young adults], he said, but the nature of this vulnerability has yet to be identified.

Hall referred to research indicating a linear relation between the frequency of use of cannabis before age 18, and the risk of being diagnosed with schizophrenia by the age of 33. “It is unclear whether this means that cannabis precipitates schizophrenia, whether it is a form of self-medication [of an existing psychosis], or whether the association is because of the use of other drugs, such as amphetamines, which heavy cannabis users are more likely to use”, he reported.

Although there is evidence that cannabis dependence is associated with a some-time diagnosis of schizophrenia, there is better evidence that cannabis use can exacerbate the symptoms of schizophrenia. The onset of such symptoms are more likely to be acute rather than insidious among heavy users of cannabis, said Hall.

Peter Harrigan