Material do Aluno

Resolução de Prova

Texto e exercícios retirados da

Prova de Proficiência em Língua Inglesa

Saúde

Universidade Federal de São Paulo- UNIFESP

Texto 03

Gene Variation Tied to Early Sudden Cardiac Death

Texto 3: Gene Variation Tied to Early Sudden Cardiac Death

A- A genetic mutation that increases the risk of blood clotting raises the risk of sudden cardiac death in early middle age, researchers in Finland report. The variation, which akes blood stickier, was more than twice as common among men who experienced sudden cardiac death before age 55 than in men who died from other causes, according to study findings published in the August 21st issue of Circulation: Journal of the American Heart Association. The mutation was also more common in men who died from a heart attack or who died after a heart artery became blocked.

B- Sudden cardiac death occurs when a person's heart abruptly stops functioning, and coronary artery disease--the clogging of arteries supplying the heart with blood--is the most common cause. But sudden cardiac death sometimes occurs in apparently healthy people without any symptoms of heart disease. “**We** have identified a new risk factor increasing markedly the risk of fatal heart attack in early middle age," the study's lead author, Dr. Jussi Mikkelsson of the University of Tampere, told Reuters Health. “Such an event is usually unexpected and occurs in an individual without previous symptoms of heart disease." In the study, the researchers reviewed the autopsies of 700 mostly middle-aged Finnish men who died suddenly outside of the hospital. **They** determined whether the men had a variation called HPA-2 Met, which affects blood components called platelets that are involved in blood clotting.

C- Compared with men who died from causes unrelated to heart disease, those who died from a heart attack were twice as likely to carry the gene mutation, the report indicates. Men who died of an artery blockage called coronary thrombosis were 2.6 times more likely to have the variation. The link between the variation and heart-related death was particularly strong in men younger than 55, according to Mikkelsson's team. In younger men, the variation was 2.2 times more common in those who had experienced sudden cardiac death. Among all men younger than 55, the variation was present in about 59% who had died from a heart attack and 70% who had died from coronary thrombosis, but it was found in only about 20% of younger men who died from causes other than heart disease.

D- The findings will not have an immediate effect in the clinic, but they may have an impact within the next decade, Mikkelsson noted. The Finnish researcher speculated that someday doctors may run a panel of genetic tests on patients in their 40s who have a family history of heart disease. “The results of this panel would thus make **it** easier to predict the risk of heart disease and guide therapeutic decisions in the primary prevention of heart disease," Mikkelsson said.

E- Studies are under way to see whether drugs that reduce the risk of blood clots, such as aspirin, may lower the risk of heart disease in people who carry the genetic variation, the researcher pointed out. “However,” he added, ``it is possible that aspirin is not enough to lower the risk.'' Mikkelsson said that there are several drugs--both on the market and in clinical trials--that specifically target the platelet receptor affected by the gene variation. Also, he suggested, people with the variation might be able to reduce their risk of heart disease by controlling traditional risk factors for heart disease, such as smoking, diet, exercise and high blood pressure.

Test Questions

Mark your answers on the Answer Sheet

I - The text is divided into sections A, B, C, D and E. Using <u>EACH LETTER ONLY ONCE</u>, identify which section of the text

25. presents compelling statistical evidence suggesting connection between the gene mutation and cardiac deaths.

26. tells the reader not to expect practical benefits from the study until after some years.

27. suggests that prevention is still the best bet against heart attacks.

28. tells us that not all people who die from heart attack have a previous history of heart disease

29. cites authoritative sources for the new discovery.

II. Are these statements True (T) or False (F) according to the text?

30. The genetic mutation referred to in the text destroys platelets. ( )

31. It is now an established fact that aspirin can help those who are diagnosed with the gene variation. ( )

32. The studies reported in the text did not involve elderly people. ( )

III. Indicate which option is the correct explanation of what these referential terms mean in the text

33. “We” (line13)

a) The team of researchers who conducted the study

b) Dr. Jussi Mikkelson of the University of Tampere

c) Persons with cardiac problems

d) The Editors of Circulation: Journal of

American Heart Association

34. “They” (line 18)

a) Middle-aged Finnish men

b) The researchers

c) The autopsies

d) None of the above

35. “it” (line 36)

a) this panel

b) a family history of heart disease

c) the risk of heart disease

d) none of the above