

Egyptians design 'faster, cheaper' hepatitis C test

March 14 2012

The American University in Cairo said Wednesday that a team of its researchers has designed a faster and cheaper test for all types of hepatitis C, which it says affects about 10 million Egyptians.

The development "reduces the two-step testing process carried out over a number of days to a one-step process that takes less than an hour... at a fraction of the cost of traditional diagnostic protocols," the university said.

The liquid chemistry test can diagnose <u>hepatitis C</u> using <u>gold nanoparticles</u>, it said.

"Our test is sensitive and inexpensive, and it does not need sophisticated equipment," said Hassan Azzazy, professor of chemistry and head of the research team.

"Detecting HCV during the first six months raises the recovery rate to 90 percent. Little is done on the national level to combat the alarming prevalence of hepatitis C in Egypt," said Azzazy.

The AUC said Egypt has about 10 million people who suffer from the hepatitis C virus (HCV), with the blood-borne pathogen infecting almost 500,000 in the country each year.

Worldwide, around 170 million people are estimated to be living with the chronic disease caused by the virus.



Unlike hepatitis A or B, most people infected with HCV cannot shake off the virus on their own because, when under attack by the immune system, it morphs into stronger variants.

The World Health Organisation estimates that three to four million people are newly infected with HCV each year.

The WHO says Egypt has one of the highest rates of hepatitis C prevalence in the world, putting the rate of infection in the country at 22 percent.

Contamination can occur through blood transfusions, blood products and <u>organ transplants</u>, and the virus can also be passed on to a child if the mother is infected.

(c) 2012 AFP

Citation: Egyptians design 'faster, cheaper' hepatitis C test (2012, March 14) retrieved 23 April 2024 from https://medicalxpress.com/news/2012-03-egyptians-faster-cheaper-hepatitis.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.