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The international symbol for diabetes - the blue circle
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Diabetics Have Higher Risks of Heart Conditions

The expression of some genes is amplified by diabetes

Recently-published studies link type II diabetes with a higher chance of patients developing heart conditions, such as coronary artery disease (CAD), and suffering a stroke or a heart attack afterwards. The risk was also linked to the presence of a specific gene, residing on chromosome 9p21, whose mutation ups the chances of a person developing CAD significantly. Also, type II diabetics who had this mutation exhibited a four times increased risk of coronary disease than others in control groups.

The studies focused on two major groups. In the first one, composed of 734 people, 322 patients were suffering from CAD, while the rest only had type II diabetes - this group was under medical observation for 5 years, between 2001 and 2006. The second group only featured 475 people suffering from type II diabetes, but their medical evolution was recorded from 1993 to 2004, totaling 11 years.

"Coronary artery disease is one of the leading causes of death in this country and diabetes is a major risk factor for coronary artery disease. But not everybody with diabetes is at the same risk," explained Harvard Medical School scientist Dr. Alessandro Doria, the author of the current studies, who published his research in the Journal of the American Medical Association.

His discoveries apply most to those diabetes type II sufferers who struggle to bring their blood sugar levels under control. This class of people, who also exhibited two copies of the 9p21 gene - as evidenced by the hemoglobin A1c blood test - showed a 400 percent increased chance of developing CDA and/or heart attacks or strokes.

"Further studies are necessary, but the two factors - poor glycemic control and genetic variant on chromosome 9 - appear to enhance each other," added Doria during a press conference, saying that these finds should make it easier for doctors to accurately predict the course of the disease in each sufferer, so as to tailor the treatment options for each individual.