APOE IN ALZHEIMER'S PREVENTION: PRECISION MEDICINE APPROACH

We have just posted QUOTE #36 today, which you will hopefully read. It has been published in October 2018, in fact just about one week ago…

You may want to notice that, as an exception, I keep the same title for my TWEET (so-called tweet as you must have understood) as it was given for my QUOTE. This wants to express how important this topic should show!

Indeed, this article likely represents the best illustration of major interest as well as of practical clinical applications from performing genomic tests.

In this particular case, the idea consists in genotyping apoE to find out if one carries the E4 allele, in opposition to E3 or E2. The first one, apoE4, is linked with higher risk to develop Alzheimer's Disease (AD), plus at a younger age, whereas apoE2 reduces that risk. Please bare in mind that each of us inherits two copies of any gene, one from each parent, which does complicate the matter. But clearly, E4/E4 is worse, E2/E2 is better.

What appears today as super fascinating is that we can prevent about one third of AD cases by risk factor modification, i.e. by adapting lifestyle, diet, and what we call comorbidities (hypertension, diabetes, hyperlipidemia). And what should be done to reduce the risks depends on your genotype!