

Traditional Tibetan medicine as an ancient personalized medicine and its relevance in the modern world.

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Abstract

TTM having a great history meets all the parameters of personalized medicine. TTM's constitution correlates well with certain genetic polymorphisms. A constitutional approach can be promising for the treatment of certain chronic diseases. The method of constitutional (SNP based) seasonal diet therapy and lifestyle in TTM can become the leading one for the compilation of protocols for preventive medicine.

1. Introduction

More and more scientific discoveries are happening in the world, more and more we start to know new about ourselves at the microscopic level. But at the same time we lose the sense of integrity.

The world is changing, and medical approaches are changing. If a hundred years ago the main cause of death was infectious diseases, now it is cardiovascular diseases and oncology, which is in fact the outcome of chronic sluggish diseases. (1)

Now we already know what is genetics and epigenetics are. Genetics suggests the development of a disease, and epigenetics allows to develop or not develop the disease. Now we know that changing the way of life, physical activity, nutrition, stress level, can reduce the likelihood of negative genes. Having decoded the human genome, we have access to a unique code through which we can try to manage our health and even life expectancy.

Proceeding from the postulates formulated in 2008 by the American biologist Leroy Hood, the whole world learned about the main criteria of modern medicine. Modern medicine must be predictive, preventive, personalized and participatory.

If we study the theory of Tibetan medicine and approaches to the treatment and prevention of diseases, then we can find all these criteria in Traditional Tibetan medicine (TTM).

So the predictive value of medicine is achieved through knowledge of the typology in traditional Tibetan medicine. Several works have already been done on the comparison of genetic polymorphisms and some other constitutional types of traditional medicine. In this paper we will review the most interesting data in this direction. Knowing your set of polymorphisms or the constitution, we can talk about the likelihood of developing diseases that are associated with risks for this constitution.

Preventive - immediate correction of the conditions detected as a result of diagnosis. In TTM, there is an ancient nutritional approach to the treatment of various disorders of typological or resulting imbalances in life.

Personalization - here the approach is built not only by constitutional type (genetics), but also an individual disorder of balance. So in TTM some diseases, characterized by the same symptoms, can have a different therapeutic approach. Differentiation of diseases is carried out according to certain diagnostic criteria, through pulse reading, urine analyze, tongue, eyes, ears and a special method of questioning the patient.

Participation - the patient is an active participant in the healing process, is trained and can independently adjust his state. Undoubtedly, in antiquity this approach was a guideline for following the rules. But in the modern world, the possibilities are much broader and we can recommend coaching sessions or schools for patients to more effectively introduce new healthy habits and provide correction of the state during the healing process

Thus, TTM meets all the criteria of modern medicine and can be recommended for use in medical institutions. Moreover, economically this medical approach can become more profitable, since diagnostics does not involve the use of complex laboratory and functional studies and can be recommended for use in screening preventive examination and for the treatment of chronic diseases.

2. Predictiveness

It is known that various constitutional types, in this case Ayurvedic, may metabolize various pharmaceutical preparations in different ways (2). We consider it legitimate in this article to use the study of constitutions in Ayurveda, since these constitutional types almost coincide with the constitutions in TTM. And since a different level of metabolism of the same drugs is called pharmacogenomics, this marker can also be used to determine the typology. So the following SNPs are important markers for pharmacogenomics that have been compared with constitutions: CYP2C19, CYP2B6, ESR1, F2, PGR, HLA-B, HLA-DQA1, HLA-DRB1, LDLR, CFTR, CPS1. Some of them showed clear tropism to one of the Ayurvedic constitutional types.

Undoubtedly, such an approach is promising from the point of view of the general utility in the management of patients on allopathic preparations, and the constitutional approach will be a screening method before determining pharmacogenomics, that is, the ability of a drug to affect different people.

3. Nutrigenomics.

In traditional Tibetan medicine, there are a large number of methods for prevention the development of diseases. This is the special procedures for balance the predominant humours. This is prevention procedures for correction the manifestation of negative genes such as the correction of nutrition, lifestyle, treatment with traditional Tibetan medicines and external procedures.

Food components can affect to our genome activating different genes (3, 4). In TTM, and in Ayurveda (5) there are also such parallels. Moreover, in TTM, not only the the constitution but also the time of year and the locality where it lives, are important for compiling a diet. All these are important components for disease prevention plan.

4. Preventiveness

Preventive medicine is now developing and it will be promising to focus its attention on preventive measures in TTM.

In our work we have already managed to survey more than 50 genetic maps of patients with different constitutional types according to TTM.

We research key SNP. A correlation was established between predisposition to the development of diseases according to TTM and genome data. (the article is being prepared for publication).

On what we were based.

From the TTM texts the possible risks of the development of various pathologies for representatives of different constitutional types are known. Of course, this is due to the peculiarities of metabolomics, genetics and epigenetic factors for the manifestation of various nosologies. In our work, we managed to look at the genome of people and for their constitutional component according to the traditional approaches of Tibetan medicine.

Thus, it was possible to identify certain statistically significant prevailing SNP from people with the constitution of rlung, tripa and badkan.

Based on the obtained data, we can talk about the correlation of constitutional types and data of the genome from the point of view of the development of constitutionally associated diseases.

Conclusions:

Thus, traditional Tibetan medicine in the future can meet all the requirements of modern personalized medicine. Having vast experience and approaches to the treatment of various chronic nosologies according to the constitutional types of TTM can become a medicine of choice for people who prefer naturotherapy, who have a serious allergic anamnesis, for children and the elderly. Having vast experience in preventive medicine, namely clear instructions in texts on seasonal nutrition, diets on constitutions, seasonal recommendations on lifestyle, the use of traditional Tibetan medicines, we can draw up protocols of preventive medicine. Recent research on the activity of some components of traditional Tibetan Tibetan drugs in the field of anti-aging medicine (6) opens new prospects for revising and substantiating the theory of TTM, and also play an important role in evidence base.

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