Pro Index | Journal of Science in Medicine and Life
Volume: 2 Issue: 10 Year: 2024
ISSN: 2992-9202 | http://journals.proindex.uz

The Role of the DPYD Test in Managing a Successful Response to the Covid Pandemic

Allazov Iskandar Salakh ogli
Samarkand State Medical University, Samarkand, Uzbekistan

Abstract: This article is devoted to the topic COVID-19, which describes ways to determine the levels of morbidity and infestation of COVID-19 in. The article presents the current epidemiological indicators of COVID-19 coronavirus infection. Clinical manifestations and risk factors of this infection were noted. The current situation in the world.

Key points: COVID-19 disease; incidence of SARSCoV-2; Etiology of COVID-19; Pathogenesis of COVID-19; Coronavirus pandemic; clinical manifestations of coronavirus infection; the situation in the world.

The COVID-19 pandemic is a pandemic of COVID-19 coronavirus infection caused by SARS-CoV-2, a coronavirus of severe acute respiratory syndrome. The disease, first reported in December 2019 in Wuhan, China, was declared a pandemic by the World Health Organization on March 11, 2020. Experts investigating the origin of the coronavirus have ruled out the assumption that the disease originated in the laboratory.

The data that formed the basis of the research process were collected as a result of joint research by Chinese and foreign scientists. It was noted that the delay in publishing the final conclusions was not due to possible disagreements between experts. As of September 1, 2021, more than 218 million people in more than 192 countries and territories have been infected with the virus; more than 4,520,000 people have died from this disease, and more than 195 million have been cured. Apparently, outbreaks are escalating in China, Europe, Iran, South Korea and the United States. The virus is transmitted from humans. The objects reacted in a similar way, with some of them "insertion" capabilities were created to facilitate the collection and processing of additional samples. Test kit manufacturers also responded, highlighting their efforts to simplify and improve the effectiveness of tests. One of the innovations is the optimization of saliva tests, which allows avoiding the collection of cotton from the nasopharynx, which is very laborious and usually requires close contact with a medical professional. Despite concerted efforts by the public and private health sectors to build capacity and develop a testing pathway, disease diagnosis and detection remain among the pillars needed to protect communities and combat the pandemic. At the beginning of the pandemic, national initiatives emerged around the world to increase the number of hospital beds and related personnel.

Leishengshan Hospital in Wuhan was one of the hospitals built by China to treat many COVID-19 patients. Hospital This raises the question of whether strategies exist to reduce the need for enhanced intensive care among patients undergoing cancer treatment or other emergency interventions. Capecitabine, a drug containing fluorouracil (5-FU) and 5-FU, is a fluoropyrimidine chemotherapy used to treat cancer. These drugs are a key component of the chemotherapy regimen for colorectal cancer, breast cancer, hepatocancreatobiliary and many other cancers. These drugs are catabolized by the enzyme dihydropyrimadine dehydrogenase (DPD), the DPYD gene encoded by itself. Approximately 3-5% of the European population has a partial deficiency of the DPD enzyme

due to a mutation in the gene a complete deficiency of the enzyme has also been described. It is reported that up to 8% of the entire US population have at least a partial deficiency

Persons with a complete deficiency are at risk of life-threatening or even fatal toxicity of chemotherapy when administered with 5-FU or capecitabine. Patients with partial insufficiency usually experience adverse reactions, such as prolonged vomiting in the gastrointestinal tract, as well as hematological effects during standard dose therapy, including a decrease in the number of white blood cells. The latter exposes patients to the risk of serious infection, and with partial insufficiency, fever is often noted. Some studies have shown that almost 25% of patients receiving fluoro pyrimidine chemotherapy as a first-line drug experience severe toxicity.

The DPYD test allows you to identify people with partial or complete deficiency, or a modified dose, or an alternative therapy prescribed to prevent such adverse reactions. In addition to the net clinical benefit to the patient, a recent study showed that the average cost of admission to the ICU was almost 47,000 euros per person due to DPYD toxicity, and therefore screening all patients before DPYD is cost-effective Along with continuing support for initiatives that contribute to a robust virus testing and tracking program, governments around the world should pay attention to examples of other types of testing, such as DPYD screening, being used innovatively to reduce the burden on resources critical during a pandemic.

BIBLIOGRA PHY

1. Epidemiology of infectious diseases. Study guide.Yushchuk Nikolay Dmitrievich, Grishina Yulia Yuryevna, Kukhtevich Evgeniya Vyacheslavovna , Martynov Yuri Vasilyevich. GEOTAR-Media, 2016. 496 c
2. General epidemiology with the basics of evidence-based medicine - Pokrovsky V.I. 2012 edited by V.I. Pokrovsky, N.I. Brik
3. Yarilin A.A. Immunology / A.A. Yarilin– - M.GEOTAR-Media, 2015.840 p.
4. Press Information Bureau, Government of India, Ministry of Information & Broadcasting. Cabinet Secretary on “Novel Coronavirus” Outbreak. Available from: https://pib.gov.in/ newsite/PrintRelease.aspx?relid=197678, accessed on March 3, 2020.
5. Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, et al. A novel coronavirus from patients with pneumonia in China, 2019. N Engl J Med 2020; 382 : 727-33.
6. World Health Organization. Coronavirus disease 2019 (COVID-19) Situation Report - 46. WHO; 2020. Available from: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200306-sitrep-46-covid-19. pdf?sfvrsn=96b04adf_2, accessed on March 10, 2020.