



MEASURES FOR LIFE WITH COVID AND AFTER COVID

Over half a million people in the Czech Republic have now contracted Covid-19. The great majority have recovered, but the total number of affected patients is continuing to rise. This situation is highlighting the issue of whether the antibodies that form in these patients provide protection against further infection, and if so, for how long. And it also raises the question of how to care for those who have contracted the disease.

A great deal has been written about prevention against Covid-19, and now the problem of the consequences of contracting the infection is becoming ever more topical. "The recorded courses of the infection show a wide range of intensity of complaints and varying lengths of duration of the illness and convalescence. Furthermore, even after having recovered from the illness, patients may experience health complaints, most frequently manifestations of fatigue, anxiety, joint pain and headache, pressure on the chest, breathlessness or depression," says Dr. Kateřina Bičíková, personal doctor at Program Health Plus. Less frequently observed are deterioration of memory, dementia, swelling of the feet, irregular pulse and the onset of compulsive behaviour. Due to possible persistent symptoms, the clinic offers clients who have suffered from covid-19 a special post-Covid examination, focusing on persistent complaints. This may be useful also for clients who suffer from anxiety, concerns or fear of possible consequences of the pandemic, and who also suffer physically as a result. "Upon examination in the surgery, our personal doctors prepare a tailor-made individual plan of targeted examinations for clients, including laboratory analyses, chest X-ray, ECG, echocardiography, spirometry, blood oxygen saturation and so on. The diagnostic plan can be planned in advance also in a telephone consultation with a personal doctor," adds Dr. Bičíková. According to the results, it is possible also to ensure additional examinations with specialists, depending on the

character of the health complaints, from orthopaedic examinations to psychological consultations.

ANTIBODY RESPONSE

Another key issue that has attracted the attention of both experts and the public is the organism's immune and antibody response to the SARS-CoV-2 virus. Antibodies are mostly determined from blood serum or plasma. As a result, this does not serve for diagnosis of acute illness, but for the detection of the formed antibodies and measurement of the antibody response in people who have already suffered from the illness, in persons in the later phase of the disease or for checking the antibody response after vaccination. "According to the most recent studies, antibodies form in 95 % of those infected with the SARS-CoV-2 virus, beginning most frequently between the 10th and 21st day after infection. In the case of mild courses of the illness, the antibody response may persist for longer, up to four or more weeks. Meanwhile, in approximately 5 % of people no antibodies are detected whatsoever," informs personal doctor Dr. Roman Košek. Studies show that the levels of antibodies may be relatively stable as long as four months after determination of the diagnosis of Covid-19. The size of the organism's antibody response is dependent upon the severity of the course of the illness. For this reason, in people who have experienced asymptomatic infection or a mild course of the disease, immunity produced by antibodies against SARS-CoV-2 may not be long-term.

HOW LONG DOES IMMUNITY LAST?

"It's known that the level of antibodies against other coronaviruses are reduced to an undetectable value within the range of 12 to 52 weeks. After that, reinfections have been observed. So far it's been determined that levels of antibodies against SARS-CoV-2 last for 94 to 140 days after infection," states Dr. Košek. The possibility of reinfection means that people who have been infected once with SARS-CoV-2 cannot be definitively considered immune, and may be infected again. Even if there have been few confirmed cases of reinfection to date, more information and a longer observation period are necessary in order to determine the period of duration of immunity, the probability of reinfection and the consequences thereof. "Even if it's not yet possible to provide convincing evidence that antibody responses to SARS-CoV-2 protect against reinfection, it is probable that they can reduce the risk of repeat infection and alleviate the course of the illness if reinfection occurs. This should apply also in the case of the currently approved vaccines against Covid-19," he concludes. We will inform those interested in vaccination against the new coronavirus sufficiently in time. You can find more information about the measurement of antibodies on our website in the column "What our doctors advise". From January, the clinic's team of doctors will also commence a long-term controlled study of the development of antibody levels in clients who have tested positive for Covid-19 and consent to repeated testing for antibodies.

INTRODUCTION

Dr. Kateřina Bičíková,
Head doctor of internal
medicine department

YOUR HEALTH IN THE BEST HANDS

The whole year of 2020 has been lived in the shadow of the new coronavirus, and our last newsletter of this year is no exception in featuring this ever-present theme. With the development of the pandemic and the growing number of studies on Covid-19, we are learning the answers to certain questions about this new and potentially malignant infectious disease, but new questions are also arising.

One of the most important areas that is attracting the interests of both doctors and the public is health complaints in people who have contracted the SARS-CoV-2 virus, in whom various systems persist even after convalescence. For this reason, the clinic offers clients diagnosed with Covid-19 a special post-Covid examination. Those interested in an individual diagnostic plan can simply contact their personal doctor.

A further fundamental issue is the question regarding the duration of immunity against the new coronavirus, whether it is triggered by vaccination or by antibodies produced upon suffering from the disease, and also the risk of reinfection. In recent months, the team of personal doctors at Program Health Plus has devoted a large amount of time to the study of key Czech and foreign medical trials in order to provide clients with the most informed Covid healthcare, both within the framework of prevention, diagnosis and therapy, and of protection against reinfection. As a result you can be secure that your health is now in the best hands.

The Program Health Plus Team wishes all clients and their families a joyful Christmas season and many successes in the New Year.

Dr. Kateřina Bičíková

NEWS

A GIFT FOR THE ENDOWMENT FUND FOR CHILDREN

The clinic co-operates very closely with the Department of Paediatric and Adolescent Medicine at the General University Hospital in Prague, recently renamed the Department of Paediatrics and Inherited Metabolic Disorders. For this reason, in the pre-Christmas period Program Health Plus has devoted a substantial gift to the Švejcár Endowment Fund for Children in Karlov, which supports and develops the activity of the paediatric clinic. The financial contribution will be used for the purchase of a special bed. We shall inform you of the details in our next newsletter.



NEW EXAMINATION OF GLYCATED HAEMOGLOBIN USING THE POCT METHOD

Our surgeries of personal doctors for adults and children now provide the option of an examination of glycated haemoglobin HbA1c, which is used for the diagnosis and monitoring of the treatment of types 1 and 2 diabetes mellitus. A sample is taken from capillary blood of those interested in the examination, and the result is available within 5 minutes. For patients being treated for diabetes, it is recommended to undergo the examination 1x to 4x per year.



PROGRAM HEALTH PLUS AGAIN AMONG THE BEST FIRMS IN THE CZECH REPUBLIC

Before the first weekend of Advent, the Comenius Pan-European Society announced the results of the prestigious competition Czech 100 Best, which celebrates its 25th anniversary this year. For the second time in its history, the Program Health Plus clinic achieved success in the competition, in the category of Health, Education and Humanity.

The company was awarded due to its results in the field of the development of Czech healthcare, and the introduction of modern foreign trends and technological innovations in medical care. "We view what is now our second success in this respected competition as confirmation that we have set out in the right direction. And as an appreciation of the excellent work of the entire Program Health Plus team, which is concentrating its utmost efforts to ensure that clients are provided with top quality care, both within the framework of classical medicine and also within the framework of the broad possibilities of electronic healthcare," stated company founder and operational manager Dr. Oldřich Šubrt. For example, rapid development in the area of digitalisation of health care has brought the smart mobile app HealthPlus, nicknamed "a clinic in your pocket".

ANNOUNCEMENT IN THE SHADOW OF THE COVID

Just like most public events this year, the announcement of this silver jubilee year of the competition was marked by the state of emergency and measures in connection with the coronavirus pandemic. "The fact that the world has dramatically changed beyond recognition over the last few months is something we too have to adapt to, however complicated it's been this year. What's most important is that the Czech 100 Best competition was able to take place, with practically the only exception being the gala evening

at Prague Castle," informed Karel Muzikář, president of the Comenius Pan-European Society for Culture, Education & Scientific-Technical Co-operation. The competition results were announced on Friday 27 November, and confirmed the long-term dominance of the companies Škoda Auto, ČEZ and Kooperativa. Also featured in the top ten were the companies Mattoni, Mountfield and Czech Television.

HOPE FOR FUTURE YEARS

In addition to the table of the Czech 100 Best firms, within the framework of the competition 8 specialist categories were announced, and two dozen personalities were awarded in the categories "Lady Pro" and "Gentleman Pro". An international conference also took place, entitled "Key Factors of Success", with several distinguished speakers, held in digital form due to the coronavirus. As is the case every year, the selection of awarded companies and personalities was decided upon directly by representatives of individual Czech firms on the basis of questionnaires, which the Comenius Society sends out in a circulation of 25 000 each year. "We hope that the Czech 100 Best competition will outlast the coronavirus pandemic, and that in future years Program Health Plus will again appear in one of the specialist categories. Our entire team will work assiduously towards this goal," concluded Dr. Šubrt.

PREVENTION OF WINTER JOINT PAIN

In the winter many people suffer from pains in various different joints, which can be highly unpleasant and complicate their mobility as well as several other regular activities. Why does joint pain increase in the winter, how can we avoid it and effectively alleviate it? Useful advice is provided by Dr. Luděk Zmolík, orthopaedist at Program Health Plus.

Why does joint pain often worsen in the winter?

People who suffer from joint ailments often complain that the winter and chilly weather lead to a worsening of their pains. There are three main factors related to the weather – atmospheric pressure, temperature and air humidity. Pain and stiffness of joints mostly worsens together with increasing barometric pressure, and with damp and falling temperatures. Low temperatures may increase the density of the fluid inside joints and cause their "stiffness", which can be felt in motion. Several scientific studies have been compiled on this theme. There is not a 100% consensus among scientists regarding the principle by which the weather negatively influences a person's current condition of health. One of the most probable theories relates to the change of barometric pressure. Sensitivity to the weather is termed meteosensitivity, and its characteristics are entirely individual. In individuals affected with disorders of the joints we find this very frequently, although it is not the only diagnostic symptom.

Are there any ways of avoiding winter joint pains, or at least alleviating them?

Joint pain upon a change in the weather, without other accompanying symptoms, may but need not necessarily be a sign of illness. If you have other symptoms, such as pain during movement, swelling of the joints, limited mobility and so on, it's suitable to consult a general practitioner, who can treat the patient with non-steroidal anti-rheumatic drugs (e.g. Ibuprofen or Diclofenac), or according to the situation may send the patient to a specialist for a further examination.

Are there any ways of avoiding winter joint pains, or at least alleviating them?

When temperatures drop, try to stay in the warm as much as possible – have a hot shower or bath, make sure you wear warm clothing, wear gloves, even at home, and thick socks, at night use an electric blanket and in general turn up the heating. With regard to overall measures, it pays to maintain a healthy weight and stay active.

COVID-19 TESTING

In this column we usually bring you interesting statistics from the field of health, but this time we are making an exception to present an overview of the available tests for Covid-19. Your personal doctor will advise you on the choice of a suitable test, orders for appointments will be arranged by our clinic's reception.

PCR TESTS AT TESTING STATIONS

If clients need to take a PCR test due to ordered quarantine or due to manifestations of symptoms of Covid-19, it is necessary to undergo testing at state registered centres. The recommended procedure is to contact the reception or your personal doctor, who will make out an electronic requisition form and arrange a suitable testing appointment. The clinic has reserved times at selected testing stations, tests can be arranged for a specific time and take place without waiting.

PCR TESTS WITHIN THE CLINIC'S PREMISES

Should clients need to be tested for administrative reasons (due to a trip abroad, after returning, due to visiting social service institutions etc.), and have no symptoms of the disease, they may undergo a PCR test in a testing surgery within the clinic's premises, with the possibility of compiling a certificate of negativity. Tests take place on weekday mornings, in necessary cases it is possible to arrange testing also at weekends in one of our co-operating facilities.

QUANTITATIVE ELISA TEST

Testing for Covid-19 antibodies with the aid of the Elisa test takes place directly within the premises of our clinic. A sample is taken from blood serum, from which the presence of the antibodies IgG, IgM and IgA is determined. In contrast with PCR tests, antigen tests are slightly less sensitive, but provide a faster result with sufficiently high specificity.

RAPID TEST

This is a simple, fast screening test producing a result within 30 minutes, which is used for the detection and differentiation of the antibodies IgG and IgM for Covid-19. A blood sample is taken in the clinic's testing surgery and immediately analysed. The results provide information about whether the individual in question has been in contact with the virus SARS-CoV-2, although the test is not suitable for the diagnosis of acute infection.

ANTIGEN TEST

The fast screening AG test is performed with the aid of a simple nasopharyngeal swab, and provides a result within 20 minutes. It enables detection of antigens of the new coronavirus practically immediately after infection, but may be less precise in the case of lower viral charge. After ordering, the test can be taken every weekday morning. In the case of a positive result, a PCR test will follow in order to provide greater precision.