News and Views

NTAGI Recommends to Reduction of the COVID Booster Dose Gap to 6 Months

A reduction of 3 months in the waiting time in administering the precautionary doses of the coronavirus disease 2019 (COVID-19) vaccine after the second dose was suggested by the National Technical Advisory Group Immunization (NTAGI), India. The Standing Technical Sub-Committee (STSC) of NTAGI recommended decreasing the time gap from 9 to 6 months on June 16, while the final decision is awaited from the Health Ministry.

The government advisory panel denied recommendations for mix-matching COVID-19 vaccines as they found differences found in the results of the study performed at the Christian Medical College (CMC) in Vellore.

The panel agreed to give the third dose to renal transplant patients before the cautionary dose. They analyzed and reviewed the data on the Covaxin and Corbevax vaccines for children aged 6 to 12, which were approved for emergency use in April.

They also showed concern about the spread of monkeypox and discussed the need for vaccination to prevent the same. Currently, anyone above the age of 18 who has completed 9 months after receiving the second dose is eligible for the precautionary dose. Last month, the Union government permitted citizens and students traveling abroad to obtain the vaccine before the 9-month waiting time mandated by the destination country's standards. (*Source: ETHealthWorld, June 17, 2022*)

Altered Neurologic Symptoms Observed in Long COVID

Altered neurologic symptoms were observed in patients with long COVID and it persisted for a minimum of 6 months. Fifty-six COVID-19 positive people were included in a study conducted from October 2020 to October 2021 and monitored at the beginning of the study and 6 months later.

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection caused neurologic symptoms were seen in all with multiple sclerosis in 16 patients. Fatigue was seen in 89.3% of participants while 80.4% complained of headaches, with lack of concentration, memory loss and sleeplessness being the other common complaints.

Among 27 patients, 68.8% complained of memory loss and 61.5% suffered from bad concentration after 6 months. A third of the individuals reported complete symptom alleviation after 6 months. Despite, an improvement in the average score on the Montreal Cognitive Assessment (MoCA), a low score was reported in 26.3% of participants. Delayed recall, language and interest were the most impaired regions of cognition from which the patients were suffering.

Uncoordinated movements and cognitive problems (PASC-TAC) were observed in 4 long-term COVID patients who had no antecedent neurologic disease and had normal imaging. These people recovered slowly, and several symptoms required medication and supportive care after the 6-month point. Six of the individuals, including two people with a history of neurologic disease, had cranial nerve impairment.

In the NeuCOVID study, the symptoms will be tracked annually for up to 10 years to figure out what mechanism was causing such a disorder and what kind of medical support these people needed. The results were published in the *Annals of Clinical and Translational Neurology.* (*Source: MedPage Today June 16, 2022*)

Immunosuppressive Drugs may not be Needed in Post-transplantation Patients

The New England Journal of Medicine disclosed that 3 children who recently received kidneys from their haploidentical parents may never need immuno-suppressive medicines.

The 3 children received their kidneys, as well as reduced-intensity conditioning and T-cell–depleted and CD19 B-cell–depleted hematopoietic bone marrow. The required medications including anti-thymocyte globulin (7.5 mg/kg), fludarabine (1 mg/kg/day for 4 days) and cyclophosphamide (1,200 mg/m^2), then total-body irradiation (200 cGy) and rituximab (200 mg/m^2) were administered to the patients to prepare for the HSCT (hematopoietic stem-cell transplantation).

The transplantation was done once donor myeloid and lymphoid chimerism following HSCT had been confirmed (at 5, 5.5 and 10 months for the individual patients). The patients were given intraoperative methylprednisolone and postoperative low-dose oral prednisone and tacro-limus in order to decrease reperfusion inflammation.

Doses of these drugs were tapered down by Day 30 and no further immunosuppression was required to be given.

The patients showed no clinical evidence of rejection. At 22 to 34 months after transplantation, renal function is normal. Two patients responded to further immunizations with a protective response, and the third was awaiting titer data at the time of publishing.

The researchers noticed that 1 year after kidney transplantation, peripheral blood mononuclear cells demonstrated functional tolerance to stimulator cells generated from their donor parent, and, thus, potentially unable to cause graft rejection even in the absence of immune suppression. However, in the presence of stimulator cells obtained from their nondonor parent or a healthy, unrelated control, their immune cells reacted normally and flourished. They further stressed the need for more studies to be conducted to evaluate if comparable results can be reached in allograft recipients who had a healthy pre-transplantation T-cell immunity and hematopoiesis. (*Source: MedPage Today June 15, 2022*)

Covaxin Safe for 2 to 18 Years Children, Shows Pune Trial

Covaxin developed by Bharat Biotech in collaboration with the Indian Council of Medical Research and National Institute of Virology has proven to be safe well-tolerated and highly immunogenic in pediatric subjects in phase II/III study.

In the study, no serious adverse events (AE) were reported out of the total 374 AE reported among the majority. These AE such as pain in the injection site, etc. were the mildest symptoms and resolved within 1 day. Dr Pragya D Yadav, stated that the inclusion of younger age groups in vaccination drives would help in breaking the infection chain and diminish the outbreak. She also added that the vaccine showed a superior response among the pediatric group in comparison to adults. However, supplementary surveillance studies are under process to identify and eliminate "rarer adverse events".

Dr Krishna Ella, Chairman and MD, Bharat Biotech, stated that the trial has established Covaxin as a universal vaccination that is safe and effective for adults and children in both dosage forms, i.e., primary immunization dose and the booster dose. Meanwhile, Dr Rajiv Jaydevan, Co-chairperson of, the Indian Medical Association's National Task Force, stated that the vaccine is capable of generating neutralizing antibodies to protect against infection. *(Source: https://timesofindia.indiatimes.com/city/pune/pune-trial-results-show-covaxin-safe-for-2-18-years-age-group/articleshow/92291222.cms*)

First COVID-19 Shot for Infants, Preschoolers Authorized

Recently, the Food and Drug Administration (FDA) authorized the first COVID-19 shots for infants and preschoolers, following the advisory panel's unanimous recommendation for shots from Moderna and Pfizer. However, there is one step left in the process, i.e., the CDC's guidelines on how to use the vaccines. CDC's independent advisors have begun debating for making suitable recommendations between the two-dose Moderna vaccinations versus the three-dose Pfizer vaccination regimen.

The FDA reports show that the little children developed virus-fighting antibodies with both vaccines. Although, both the vaccine studies showed side effects, including fever and fatigue, which were resolved in a short period; the Moderna vaccine showed an efficacy of 40% to 50% in comparison to Pfizer in the studies.

President Joe Biden, stated that the FDA approval is a huge relief for parents and families across America. For weeks, the Biden administration has been working on rolling out vaccinations for little kids with states, tribes, community health centers and pharmacies by pre-ordering millions of doses. Dr Peter Marx, FDA's vaccine Chief, stated that "both the vaccines have been approved with science and safety at the forefront of our minds." (*Source: https://health.economictimes.indiatimes.com/news/industry/fda-authorizes-1st-covid-19-shots-for-infants-preschoolers/92291696*)

Study: Omicron Carries Half the Risk of Long COVID as Delta

A recent study published in *The Lancet* showed that the Omicron variant poses half the risk of long COVID in comparison to the Delta variant. The chances of developing long COVID were found to be 4.5% from the Omicron variant in comparison to 10.8% from the Delta variant. Dr Claire Steves, King's College, London, stated that the reduced risk is good news, especially when Omicron is highly contagious. She also added that if the risk of developing long COVID symptoms were the same as the Delta variant or higher, the number of people with long COVID would have exploded.

Dr Steves and her colleagues have compared and tracked the patient symptoms for more than 56,000 people in the UK, who got Omicron infection between December 2021 to March 2022 with 41000+ people in the UK who tested positive for Delta variant between June 2021 to December 2021. On the other hand, the research team warned that the lower risk does not

mean people should not worry about long COVID as the study did not address the reason behind a lower risk of long COVID associated with Omicron variant infection. Dr David Putrino, New York, stated that though the study highlights an important disease pattern, the likelihood of contracting COVID that can progress to severe chronic illness is around 5%, which is a significant figure. (*Source: https://www.medscape.com/viewarticle/975841*)

National Exit Test to be Implemented in 2023

The National Exit Test (NeXT), a common qualifying examination, for Final year MBBS students, and simultaneously licentiate exam, will be introduced in 2023 by the Indian Government. The proposal to create a common examination came into being on 25th September 2020 through the National Medical Commission Act, 2019.

The NeXT will be a common qualifying exam that will grant permission to practice medicine in India and will serve as the criteria for merit-based allocation of post-graduate seats in broad specialties. Further, the exam will bridge the gap between students from foreign institutions willing to practice medicine in India.

A senior Central government official stated that if NeXT is introduced in the education system, then, it will do away with the need to conduct NEET PG. The official also stated that the commission plans to implement a mock test before implementing the final exam to test the procedures and remove the anxiety among medical students. (*Source: https://www.livemint.com/news/india/centre-likely-to-implement-national-exit-test-for-medical-students-in-2023-all-you-need-to-know-11655475822067.html*)

Repeated Exposure to Hurricanes can have Adverse Psychological Symptoms

A study published in *JAMA Network*, has associated the psychological outcomes with recurring natural disasters, especially with escalated threats of climate change. The researchers proposed that repeated exposure to hurricanes whether direct, indirect or media-based is associated with adverse mental health problems. Dr Dana Rose Garfin, Professor, UCI, stated that with extreme climate change, climate-related natural disasters will increase in frequency and severity in the next few years. She added that the study showed that people are not likely to habituate or get used to the disasters causing a negative impact on their mental health.

Professor Garfin and her team found that repeated exposure to the threat of catastrophic hurricanes was linked with symptoms of post-traumatic stress, depression, anxiety, fear and worry. These symptoms were further associated with greater social and work-life impairment including difficulty in interacting with others, performing work tasks and other daily activities. The team came to this conclusion after assessing Florida residents for any mental health changes who survived hurricane Irma in September 2017 and hurricane Michael in October 2018.

Dr Dana stated that some amount of distress is common after an extremely stressful event. However, a climate-related disaster can prolong the healing process due to repeated threat exposure. Anxiety is an adaptive response to disaster and can be reduced by motivating people to take protective action and be prepared for the next event. (*Source: https://www.hindustantimes.com/lifestyle/health/repeated-exposure-to-hurricanes-linked-to-adverse-psychological-symptoms-101655525809689.html*)

Liver Cancer Risks Reduced by Coffee and Tea Consumption

Study form China found that coffee and tea drinking were associated with a reduced danger, of hepatocellular carcinoma (HCC) and protected the liver, while more alcohol consumption increased the risk.

Over 2,00,000 people took part in the survey, which were divided into different categories such as ever/never drinker (n = 1,65,084), alcohol intake (n = 58,610), coffee consumption (n = 1,52,634), tea consumption (n = 152,653), milk consumption (n = 1,52,965) and yoghurt consumption (n = 1,52,097). Alcohol intake (odds ratio [OR], 1.57; 95% CI, 1.32-1.86; $p < 0.001$) and ever/never consumers of alcohol (OR, 1.11; 95% CI, 1.05-1.18; $p < 0.001$) were both positively linked with HCC risk. Lower risk of HCC was observed among coffee consumers (OR 0.69, 95% CI 0.53-0.90, $p = 0.007$), green or traditional tea consumers (OR 0.11, 95% CI 0.05-0.26) and milk and yoghurt consumers (OR 0.18, 95% CI 0.09-0.34 for both; $p < 0.001$ for both).

Previous studies showed that coffee had a protective effect against liver fibrosis. Coffee has been shown to protect against liver fibrosis in previous research. The current study found that dietary habits had a direct impact on HCC, emphasizing the necessity of maintaining healthy eating habits in the prevention of HCC. The study was published in *Hepatology Communications*. (*Source: MedPage Today June 10, 2022*)

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