



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY

Monday

20210206

Oxford COVID

Oxford COVID shot less effective against South African variant: Study (The Tribune: 20210208)

<https://www.tribuneindia.com/news/coronavirus/oxford-covid-shot-less-effective-against-south-african-variant-study-209122>

Oxford University and AstraZeneca have started adapting the vaccine against this variant

Oxford COVID shot less effective against South African variant: Study

A vial of the Oxford-AstraZeneca COVID-19 vaccine. Reuters photo

British drugmaker AstraZeneca said on Saturday its vaccine developed with the University of Oxford appeared to offer only limited protection against mild disease caused by the South African variant of COVID-19, based on early data from a trial.

The study from South Africa's University of the Witwatersrand and Oxford University showed the vaccine had significantly reduced efficacy against the South African variant, according to a Financial Times report published earlier in the day.

Among coronavirus variants currently most concerning for scientists and public health experts are the so-called British, South African and Brazilian variants, which appear to spread more swiftly than others.

"In this small phase I/II trial, early data has shown limited efficacy against mild disease primarily due to the B.1.351 South African variant," an AstraZeneca spokesman said in response to the FT report.

The newspaper said none of the more than 2,000 trial participants had been hospitalised or died.

“However, we have not been able to properly ascertain its effect against severe disease and hospitalisation given that subjects were predominantly young healthy adults,” the AstraZeneca spokesman said.

The company said it believed its vaccine could protect against severe disease, given that the neutralising antibody activity was equivalent to that of other COVID-19 vaccines that have demonstrated protection against severe disease.

The trial, which involved 2,026 people of whom half formed the placebo group, has not been peer-reviewed, the FT said.

While thousands of individual changes have arisen as the virus mutates into new variants, only a tiny minority are likely to be important or change the virus in an appreciable way, according to the British Medical Journal.

“Oxford University and AstraZeneca have started adapting the vaccine against this variant and will advance rapidly through clinical development so that it is ready for Autumn delivery should it be needed,” the AstraZeneca spokesman said.

On Friday, Oxford said their vaccine has similar efficacy against the British coronavirus variant as it does to the previously circulating variants.

Over 12,000 COVID-19 cases

Over 12,000 COVID-19 cases reported in one day, 78 new fatalities (The Tribune: 20210208)

<https://www.tribuneindia.com/news/coronavirus/over-12-000-covid-19-cases-reported-in-one-day-78-new-fatalities-209119>

Daily deaths fell below 100 for the third time this month

Over 12,000 COVID-19 cases reported in one day, 78 new fatalities

The COVID-19 active caseload remained below 2 lakh.

India’s tally of COVID-19 cases rose to 1,08,26,363 with 12,059 new infections being reported in a day, while the daily deaths fell below 100 for the third time this month, according to Union Health Ministry data updated on Sunday.

The death toll increased to 1,54,996 with 78 daily new fatalities, the lowest recorded after nine months, the data updated at 8 am showed.

The number of people who have recuperated from the disease surged to 1,05,22,601, pushing the national COVID-19 recovery rate of 97.20 per cent, while the case fatality rate stands at 1.43 per cent.

The COVID-19 active caseload remained below 2 lakh.

There are 1,48,766 active coronavirus infections in the country which comprises 1.37 per cent of the total caseload, the data stated.

India's COVID-19 tally had crossed the 20-lakh mark on August 7, 30 lakh on August 23, 40 lakh on September 5 and 50 lakh on September 16.

It went past 60 lakh on September 28, 70 lakh on October 11, crossed 80 lakh on October 29, 90 lakh on November 20 and surpassed the one crore mark on December 19.

According to ICMR, 20,13,68,378 samples have been tested up to February 6 with 6,95,789 samples being tested on Saturday.—PTI

Covid-19

Covid-19: One death, 20 new cases in Jalandhar district (The Tribune: 20210208)

<https://www.tribuneindia.com/news/coronavirus/covid-19-one-death-20-new-cases-in-jalandhar-district-208937>

Covid-19: One death, 20 new cases in Jalandhar district

The health authorities reported 20 cases in Jalandhar district on Saturday. - File photo

The health authorities reported 20 cases in Jalandhar district on Saturday. With this, the total number of positive cases reached 20,804 in the district.

Click here for the latest developments on Covid-19 epidemic

The health authorities reported one death in the district. The death toll increased to 679.

At present, the district has 244 active cases and 19,881 people had been discharged while as many as 162 people were under home isolation in the district.

Vaccinations

South Africa halts AstraZeneca vaccinations over variant data (The Hindu: 20210206)

<https://www.thehindu.com/news/international/south-africa-halts-astrazeneca-vaccinations-over-variant-data/article33777479.ece>

Instead, it will offer vaccines developed by Johnson & Johnson and Pfizer in the coming weeks while experts consider how the AstraZeneca shot can be deployed.

South Africa will suspend use of AstraZeneca's COVID-19 shot in its vaccination programme after data showed it gave minimal protection against mild to moderate infection caused by the country's dominant coronavirus variant.

Health Minister Zweli Mkhize said on Sunday the government would await advice from scientists on how best to proceed, after disappointing results in a trial conducted by the University of the Witwatersrand.

The government had intended to roll the AstraZeneca shot out to healthcare workers soon, after receiving 1 million doses produced by the Serum Institute of India on Monday.

Instead, it will offer vaccines developed by Johnson & Johnson and Pfizer in the coming weeks while experts consider how the AstraZeneca shot can be deployed.

"What does that mean for our vaccination programme which we said will start in February? The answer is it will proceed," Mkhize told an online news briefing.

"From next week for the next four weeks we expect that there will be J&J vaccines, there will be Pfizer vaccines. So what will be available to the health workers will be those vaccines."

"The AstraZeneca vaccine will remain with us ... up until the scientists give us clear indications as to what we need to do," he added.

Coronavirus mutations'

'Need to be on alert for coronavirus mutations' (The Hindu: 20210206)

<https://www.thehindu.com/news/cities/Hyderabad/need-to-be-on-alert-for-coronavirus-mutations/article33776471.ece>

CCMB Director cautions people not to let guard down despite dip in infectivity

COVID-19 cases are declining along with incidence of hospitalisation and deaths in most places across the country. Yet, scientists have cautioned people not to let their guard down but continue to follow safety measures of wearing face masks, and maintaining personal hygiene and social distancing.

“All indications are that the number of cases are becoming less and less, even if factoring the rapid antigen testing which has just about 50-60% accuracy. Importantly, the number of patients in hospitals are less and the number of deaths too has come down as is being indicated by sero-surveillance surveys. But, we need to be alert for any further mutations which could lead to more viral loads and infections,” says CSIR-Centre for Cellular & Molecular Biology director Rakesh Mishra.

This is because the evolution of the virus is such that “it wants to spread and hence, will keep creating variants without perhaps bothering the hosts yet could cause strong infectivity”. The present situation comes as a huge relief to everyone but it does not mean “we are safe as a nasty one could emerge as can be observed in the UK and other variants. Similarly, an independent variant could emerge from here and spread quickly,” he explains.

The saving grace is that symptoms of the newer variants are similar even if the spread is faster. While there could be multiple factors leading to the reduction in the infection rate across the country despite fears of elections, festivals and agitations leading to a surge, the “good news”, according to Dr. Mishra, is that the new strains noticed have not led to any re-infections and are not bypassing the acquired immunity levels.

Scientists the world over are poring through the genetic analysis of the different virus strains to understand the disease better as the long term effects on the brain, heart and other organs is not yet known. But, amid all these, the vaccination process initiated is vital, he asserted. “Even a few months of protection due to the vaccination may turn the tables, otherwise there is a chance for the virus to resurrect. Take it when your time comes,” he adds.

Chronic pain

Study on solving chronic pain during intercourse (The Hindu: 20210206)

<https://www.newkerala.com/news/2021/23503.htm>

By identifying what triggers the pain in the female reproductive tract, researchers at Flinders University are working for a remedy on pain during intercourse.

Dr Joel Castro Kraftchenko - Head of Endometriosis Research for the Visceral Pain Group (VIPER), with the College of Medicine and Public Health at Flinders University - is leading research into the pain attached to Dyspareunia, also known as vaginal hyperalgesia or painful intercourse, which is one of the most debilitating symptoms experienced by women with endometriosis and vulvodynia.

Pain is detected by specialised proteins (called ion channels) that are present in sensory nerves and project from peripheral organs to the central nervous system.

"Very little is known about which ion channels are in charge of detecting painful stimuli from the female reproductive tract; and how pain is transmitted via peripheral sensory nerves (innervating these organs) to the central nervous system. Also, little is known about how mechanical stimuli is detected and transmitted from female reproductive organs to the Central Nervous System," said Dr Castro Kraftchenko.

"This lack in knowledge provides a limiting factor for developing treatments for painful intercourse associated with endometriosis and vulvodynia. The aim of our study is to fill this gap in knowledge. this study provides novel findings advancing the understanding of vaginal sensation that can be used to recognise and explore changes in states of pain" associated with endometriosis and vulvodynia," added Kraftchenko.

The study - Pharmacological modulation of voltage-gated sodium (NaV) channels alters nociception arising from the female reproductive tract, by Joel Castro Kraftchenko, Jessica Maddern, Andelain Erickson, Ashlee Caldwell, Luke Grundy, Andrea Harrington, and Stuart Brierley, published in the journal *Pain* - describes how sensory nerves innervating a vagina (tested on mice) respond to different mechanical stimuli.

It also identifies for the first time the presence of specialised ion channels involved in the transmission of pain signals throughout these sensory nerves; and how pharmacological modulation of these ion channels alters pain signalling and ultimately regulates vaginal pain sensitivity in vivo.

"These findings contribute towards the understanding of how mechanical stimuli is detected and transmitted from female reproductive organs and uncover potential molecular targets to investigate as novel therapeutics to relieve painful intercourse," said Dr Kraftchenko.

"With this, we hope to ultimately improve the quality of life of patients with endometriosis and vulvodynia," added Dr Kraftchenko. (ANI/4 hours ago)

Premature babies

Clinical study highlights supplement change to split danger for serious retinal disease in premature babies (The Hindu: 20210206)

<https://www.newkerala.com/news/2021/23583.htm>

Gothenburg [Sweden], February 7: A clinical report done by the University of Gothenburg features the danger for a serious type of retinopathy of rashness, which can cause visual impairment in very untimely infants, was halved when the babies were given a new supplement combining different unsaturated fats.

The study published in JAMA Pediatrics is described as groundbreaking in its field. It documents a clear fall in retinopathy of prematurity (ROP) among extremely premature (EP) infants (born before 28 weeks' gestation), whose retinal blood vessels are not fully developed. The condition can cause visual impairment and, at worst, blindness after retinal detachment.

The study included 206 EP babies in the neonatal wards at the university hospitals in Gothenburg, Lund, and Stockholm over a period exceeding three years, 2016-19.

Roughly half of these newborns were given prophylactic nutritional supplements, orally, with the omega-3 fatty acid DHA (50 milligrams per day and kilogram of body weight), combined with the omega-6 fatty acid arachidonic acid (twice as much). Today, the latter fatty acid is not included in the supplements routinely administered to EP babies immediately after birth.

In the group of EP infants given the fatty acid supplement, 16 of 101 (15.8 percent) had severe ROP. The corresponding proportion in the control group was 35 of 105 (33.3 percent).

In adults, high levels of omega-6 fatty acids are associated with inflammation and cardiovascular disease. In the fetal period, arachidonic acid is an essential building block for cell membranes and act as signaling molecules between cells. The omega-3 fatty acid DHA is a vital component for blood vessels and nerve tissue.

Ann Hellstrom, Professor of Pediatric Ophthalmology at Sahlgrenska Academy, University of Gothenburg, and chief physician at Sahlgrenska University Hospital, is in charge of the study.

In previous studies, the research group has shown the connection between ROP and low arachidonic acid levels in EP babies' blood. Administering arachidonic acid as a supplement has been a topic of debate, and further clinical studies on how to devise an optimal mix of fatty acids have been called for.

"In our study, we're taking a step toward answering that question by showing such a distinct reduction in one of the severe neurovascular complications that can arise after extremely preterm birth," Hellstrom said.

Other results in the study showed no significant differences between the two groups in terms of the incidence of the lung disease bronchopulmonary dysplasia, or in the degree of an intraventricular cerebral hemorrhage, which is also common in EP infants. Sepsis occurred in slightly fewer of those who received the fatty acid supplement 42 of 101 babies, against 53 of 105 in the control group.

Every year, approximately a thousand EP babies in Sweden are screened for ROP. Four of ten born before 30 weeks' gestation suffer from the disease to some degree. In Sweden, blindness can usually be prevented with laser treatment. Worldwide, however, some 20,000 infants go blind or suffer from severe visual impairment annually as a result of ROP. (ANI/2 hours ago)