Covid-19 can cause long-term pain found

How Covid-19 can cause long-term pain found (The Tribune:20220406)


Scientists have found important insights into how SARS-CoV-2, the virus that causes Covid-19, can lead to long-term pain, an advance that could lead to a potential therapy for the disorder.

The experiments involved a hamster model of intranasal Covid-19 infection that closely reflects symptoms experienced by people.

"A significant number of people suffering from long Covid experience sensory abnormalities, including various forms of pain," said Randal Serafini, a PhD candidate at the Icahn School of Medicine at Mount Sinai in the US.

"We used RNA sequencing to get a snapshot of the biochemical changes SARS-CoV-2 triggers in a pain-transmitting structure called dorsal root ganglia," Serafini said.

Using a hamster model of SARS-CoV-2 infection, the researchers found that infection left a gene expression signature in the dorsal root ganglia that remained even after the virus cleared.

The signature matched gene expression patterns seen in pain caused by other conditions, they said.

The research was presented at the American Society for Pharmacology and Experimental Therapeutics annual meeting held between April 2-5 in Philadelphia, US.

"Our findings could potentially lead to new therapies for patients suffering from acute and long COVID, as well as other pain conditions," said Serafini.
"Our study also shows that SARS-CoV-2 causes long-term effects on the body in drastically new ways, further underscoring why people should try to avoid being infected," the scientist said.

The researchers observed that SARS-CoV-2-infected hamsters showed a slight hypersensitivity to touch early after infection, which became more severe over time, up to 30 days.

They then performed similar experiments with the Influenza A virus to determine if other RNA viruses promote similar responses.

In contrast to SARS-CoV-2, Influenza A caused an early hypersensitivity that was more severe but faded by four days post-infection, according to the researchers.

Analysis of gene expression patterns in the dorsal root ganglia showed that SARS-CoV-2 caused a more prominent change in expression levels of genes implicated in neuron-specific signalling processes compared to influenza, they said.

The researchers also found that four weeks after recovering from viral infection, flu-infected hamsters had no signs of long-term hypersensitivity while SARS-CoV-2-infected hamsters showed worsened hypersensitivity, reflecting chronic pain.

The hamsters that recovered from SARS-CoV-2 had gene expression signatures similar to those seen in the dorsal root ganglia of mice affected by pain that was induced by inflammation or nerve injury.

The researchers also predicted that SARS-CoV-2 downregulates the activity of several previously identified pain regulators and a protein called interleukin enhancer binding factor 3 (ILF3).

This downregulation occurs at times when pain behaviours in SARS-CoV-2-infected hamsters were very mild, despite heavy systemic inflammation, they said.

The researchers hypothesised that mimicking the acute effects of ILF3 could serve as a new pain treatment strategy.

They administered a clinically tested anti-cancer drug that inhibits ILF3 activity, and found that it was very effective at treating pain in a mouse model of localised inflammation.

"We think therapeutic candidates derived from our gene expression data, such as ILF3 inhibitors, could potentially target pain mechanisms that are specific to Covid patients, both acutely and chronically," Serafini added.
Omicron variant

Omicron variant less severe than Delta for children younger than 5 years: Study
The severe clinical outcomes ranged from a 16 per cent lower risk for emergency room visits to 85 per cent less risk for mechanical ventilation, the researchers said (The Tribune: 20220406)

https://www.tribuneindia.com/news/health/omicron-variant-less-severe-than-delta-for-children-younger-than-5-years-study-383519

Omicron variant less severe than Delta for children younger than 5 years: Study
Photo for representational purpose only. iStock

Children younger than five years who are infected with Omicron have less risk of severe health outcomes than those infected with the Delta variant of coronavirus, according to a study.

The research, published in the journal JAMA Pediatrics, is the first large-scale study to compare the health outcomes of coronavirus infection from Omicron and Delta in the age group which is not yet vaccinated.

The finding led by researchers at the Case Western Reserve University in the US show that the Omicron variant is 6-8 times more infectious than the Delta variant.

The severe clinical outcomes ranged from a 16 per cent lower risk for emergency room visits to 85 per cent less risk for mechanical ventilation, the researchers said.

About 1.8 per cent of children infected with Omicron were hospitalised, compared to 3.3 per cent with Delta, they said.

"The major conclusion to our research was that many more children were infected with Omicron when compared to Delta, but the children who are infected are not impacted as severely as were children infected with the Delta variant," said Pamela Davis, a research professor at the Case Western Reserve School of Medicine. "However, because there are so many more children infected, our hospitals were affected over the winter months by an influx of young children," Davis said.

The team analysed the electronic health records of more than 651,640 children in the US, including over 22,772 children infected with the Omicron variant and more than 66,000 children infected with Delta.

The study also compared the records of more than 10,000 children immediately before the detection of Omicron in the US, but when Delta was still predominant.
The researchers noted that children younger than five years are not yet eligible for COVID-19 vaccines and have a low rate of previous SARS-CoV-2 infections, which also limits their pre-existing immunity.

They examined clinical health outcomes for pediatric patients during a 14-day window following SARS-CoV-2 infection.

Among the factors they reviewed were: emergency room visits, hospitalisations, ICU admissions and mechanical ventilation use.

Analysing the demographic data, the researchers found that children infected with Omicron were on average younger -- 1.5 years of age versus 1.7 years -- and had fewer comorbidities.

Rong Xu, from Case Western Reserve School of Medicine, noted that Omicron is less severe than Delta, however, the reduction of the severity range in clinical outcomes is only 16 to 85 per cent.

"Furthermore, since so many un-vaccinated children were infected, the long-term effects of COVID-19 infections on the brain, heart, immune systems and other organs of children remains unknown and worrisome," Xu added.

Maskless states

People must continue to exercise maximum caution (The Tribune:20220406)


INDIA’s active Covid-19 caseload has declined to around 13,000 and a total of 184 crore vaccine doses have been administered to the population so far. The third wave of the pandemic has considerably receded. The Omicron variant has been less severe than the earlier variants and optimism is in the air. Accordingly, Maharashtra, Delhi and Telangana are among the states that have made wearing masks in public places optional, withdrawing a regulation that had been put in place two years ago. West Bengal and Himachal Pradesh have lifted most of the restrictions. These decisions were taken following notifications from the National Disaster Management Authority and the Union Health Ministry.

Some experts believe that the easing of the restrictions is premature — they point to a new surge in cases in countries such as China and South Korea and in Europe, triggered by new variants. The World Health Organisation’s latest advisory recommended the use of the mask to bring the pandemic under control. It can be argued, however, that in India, the rule regarding wearing the mask in public places was being only nominally followed — by people who were more law-fearing or conscientious or mindful than others about their own health. It’s likely, thus, that in the states where this rule has been removed, such people would continue to wear masks in public places. For many others — such as those who suffer from medical problems
or work in labour-intensive sectors — the removal of this rule will come as a relief, especially with the onset of summer.

A word of caution, however: India must keep a close watch on the pandemic and act with alacrity at the first sign of a dangerous new variant. As for the people, they must act responsibly, follow the guidelines and take maximum precautions that their medical condition and workplace situation allow. Even if the third wave has weakened, one must not lower one’s guard.

**Ayurveda alert**

**Ayurveda alert: Beat the summer heat with vetiver or khus roots**

"These roots are extremely cooling, and aromatic too," Ayurvedic practitioner Dr Rekha Radhamony said on Instagram (The Indian Express: 20220406)


Stay hydrated this summer with this cooling remedy (Source: Getty Images/Thinkstock)

Summertime can be extremely harsh on one’s health and lead to numerous body and skin issues. While one of the best ways to beat the summer heat is to keep the body hydrated, what if we tell you about a miracle ingredient to add to the water to not only help the body cool down but also enhance digestion?

All you need is a handful of vetiver or khus roots.

Also Read |Beat the summer heat with these effective ayurvedic tips

Ayurvedic practitioner Dr Rekha Radhamony explained the many benefits of vetiver in a detailed video on Instagram. Check it out below.

“These roots are extremely cooling, and aromatic too,” explained Dr Radhamony in the video.

Why drink khus water?

According to Dr Radhamony, apart from being cooling, it helps enhance digestion, reduces fever, thirst, and burning sensation. It is also a blood purifier, great for skin diseases, and helps in urine retention.

Also Read |Ayurvedic tips: Include these foods in your diet to beat the summer heat

How to have the water?

Add khus roots to one litre of boiling water. Drink it throughout the day.
Additional benefits

It also helps you stay odour-free, especially in the sweltering heat. (The Indian Express :20220406)

“Vetiver roots are ‘dourgandhyahara’ – they help alleviate bad odour. So if you have body odour due to excessive sweating during summer, boil some water with khus roots and add it to the water you use to take bath,” she further added.

Negative thoughts

Negative thoughts clouding your productivity? Get inspired by Taylor Swift
Take a look at this inspiring speech where the singer urged everyone to never let criticism deter their progress (The Indian Express :20220406)

https://indianexpress.com/article/lifestyle/life-positive/taylor-swift-motivational-video-7788957/

taylor-swift-1200Take a look at the singer's inspiring words. (Source: Taylor Swift/Instagram)
If you’ve been feeling bogged down by negative thoughts and feelings of self-doubt, you’ve come to the right place.

ALSO READ | ‘No matter where you’re from, your dreams are valid’: Lupita Nyong’o
Seek inspiration from Grammy award-winning singer-songwriter Taylor Swift, who is a force to be reckoned with. An active supporter of women’s rights and equal pay, Taylor is also known for her impassioned speech packed with references drawn from her own life and career.

Take a look at this speech where she urged everyone to never let obstacles such as criticism deter their progress.

Taylor has been no stranger to media scrutiny due to the fact that her songwriting possesses a distinctly narrative quality, some involving past romantic relationships.

Never one to back down, she has proved to be a notable pop icon, delivering chart topping hits such as We are never ever getting back together and All too well.

She began her speech by explaining how diamonds are created under pressure and that one should keep going, regardless of the challenges faced. “The only way forward is forward motion. We shouldn’t let obstacles like criticism slow down the creative forces that drive us. It seems like the pressure that could have crushed us made us into diamonds instead and what didn’t kill us actually did make us stronger.”

She continued, “If you’re experiencing turbulence or pressure then that probably means you’re rising and there might be times when you put your whole heart and soul into something and it is met with cynicism or scepticism.”
Fresh COVID-19

Fresh COVID-19 cases drop below 1,000, first since April 2020 (The Hindu: 20220406)


Active caseload declines to 12,597 and they constitute about 0.03% of the number of positive cases
Daily new cases in the country slipped to below 1,000, the first time it touched three digits since April 2020, according to figures from the Health Ministry. The active caseload declined to 12,597 and they constitute about 0.03% of the number of positive cases.

The weekly positive rate, a more consistent indicator of the trend in coronavirus cases, has only dipped to 0.22%. Thirteen new deaths pushed the official tally to 5,21,358.

fake medical products

Substandard, fake medical products increased by almost 47% from 2020 to 2021 during pandemic: report (The Hindu: 20220406)


Criminals saw crisis as an opportunity to sell more such products, taking advantage of vulnerability of people in need, ASPA president says
During the COVID-19 pandemic, incidents of substandard and falsified (SF) medical products increased by almost 47% from 2020 to 2021. Trade-in pharmaceutical counterfeits during this period spiked majorly relating to COVID-19 products, including vaccines, medicines, test kits, antibiotics, face masks and sanitizers. This, according to the latest report released by the Authentication Solution Providers’ Association (ASPA), an organisation working against fake medical products.

During the COVID-19 peak, incidents of SF medical were observed in 23 out of 29 States and seven Union Territories. The report pointed out that SF products were impacting every product sector, and the incidents of counterfeiting had risen with a 20% growth from January 2018 to December 2020. Globally also, pharmaceutical SF incidents rose 111% over the past 10 years, say exper
COVID-19 vaccination

Booster or natural infection will reduce the chance of another infection for just a few months, they say. India has opened up COVID-19 vaccine booster dose for its 60-plus population while discussion continues on the merits of providing precaution dose to the general population of those over 18 years. Though the government is yet to make any announcement on the issue, experts and doctors are divided on how many booster doses are needed to minimise the negative outcome of the infection.

Booster doses are given with two objectives — to reduce the chance of getting infection and to reduce the chance of death, in the event of an infection. These two parameters must be seen separately, said Rajeev Jayadevan, vice-chairman, Research Cell, Indian Medical Association, Kerala.

Delhi: Covid chart

In its highest single-day tally since the pandemic began, the city on Thursday reported 28,867 Covid-19 cases. The positivity rate surged to 29.21%, the highest since 29.6% on May 3. A total of 31 deaths were also reported. Delhi’s previous biggest daily case addition was 28,395 cases on April 20 last year. Health minister Satyendar Jain said the rise in the number of cases can be attributed to increased testing. “The number of hospital admissions has stabilised over the past four days,” he added.

The capital currently has 94,160 active Covid cases, with 62,324 of the patients in home isolation, the health department said. At present, 2,369 patients are admitted to hospitals and 98 of them are on ventilator support. A total of 164 Covid deaths have been recorded in the first 13 days of January. Most of these patients had comorbidities, according to government data. The capital saw 130 fatalities in the
past six months — nine in December, seven in November, four in October, five in September, 29 in August and 76 in July.

On Wednesday, Delhi had logged 40 deaths, the highest since June 10 last year, when 44 fatalities were recorded. The city had added 23 Covid deaths on Tuesday and 17 each on Monday and Sunday.

Critical care experts say the number of deaths can go up further as admissions due to Covid are on the rise and several patients have required oxygen or ventilator support.

“The health infrastructure is not overwhelmed this time even though the number of cases is very high. Currently, 2,424 (16%) of the total 15,433 Covid beds are occupied in the city,” said a senior official.

Meanwhile, in order to deal with any potential crisis, the state government has ordered Lok Nayak and GTB hospital to postpone elective surgeries. AIIMS, RML and Safdarjung have already curtailed OPDs and postponed elective or planned surgeries.

Doctors say Covid-19 caused by the Omicron variant, which is driving the third wave of the pandemic in India and other parts of the world, is mild in most patients as it affects only the upper respiratory tract. However, they add, some patients also suffer from infection in the lungs, which can cause breathing difficulty.

“People should not take it lightly. It is important to follow Covid-appropriate behaviour to break the chain of transmission,” said Dr Rommel Tickoo, director, internal medicine, Max Saket.
Cluster approach - Covid virus

Cluster approach in Delhi to seal the deal against Covid virus (The Times of India: 20220406)


A containment zone is created at any location that has two or more cases and the cluster is sealed off.

NEW DELHI: Even as Delhi recorded the highest single-day spike in Covid-19 cases on Thursday, the number of containment zones in the city also spiralled to 23,997. There were just 1,243 such zones on January one, so the number has risen over 17 times in just 13 days.

While the highest number of red zones were in south Delhi for more than a month, more sealed zones are now being reported from central Delhi areas like Karol Bagh, Rajinder Nagar and Paharganj. Even though south Delhi localities like Vasant Kunj, Vasant Vihar and Greater Kailash still have a preponderance of contained areas, it is the Central district that currently has the highest number of containment zones — 2,690 — followed by West (1,814) and South (1,481) districts.

download (2)

The number of active cases in the national capital stood at 94,160 on Thursday, close to the all-time high of 99,361 active cases on April 30, when the number of containment zones was 37,223. While these numbers are similar to those during the devastating second wave of infection last year, the containment strategy has actually changed since then.

The guidelines and protocols regarding cordoned areas have, in fact, changed vastly with those in force when the first containment zones came up in March 2020. At that time, it was not unusual for entire lanes to be barricaded and passages barred for everybody. The norms also mandated that containment zones could only be de-notified 28 days after the last confirmed Covid case. To ease the problems faced by residents due to the prolonged period of isolation of the zones, the Union health ministry suggested in mid-2020 that states de-notify the sealed zones 14 days after discharge of the last confirmed case.

The strategy was again tweaked to create micro containment zones, where instead of entire lanes, just one house or a few flats sharing a common corridor in a building were sealed. In congested areas particularly, very small locations were also demarcated as red zones.

In 2021, the strategy changed further with the overall focus on ‘clusters’ that had such micro containment zones. “Every day, a ‘cluster analysis’ of all the fresh cases are carried out because ‘cluster control’ is very important for disease containment,” a Delhi government official explained.

The decision to notify an area as a containment zone is based on the assessment of the chief district medical officer, the district magistrate and the district surveillance officer. The government official said that the minimum containment period is 21 days, of which the first seven days are strictly monitored by Civil Defence volunteers to prevent Covid-positive individuals from leaving the area. This is then scaled down and finally denotified as a contained area.

“A containment zone is created at any location that has two or more cases and the cluster is sealed off,” the official said. “Perimeter control is stringently maintained and the area SHO is immediately informed. A close watch is also kept at common facilities from where things of
It is important to ensure that those within containment zones do not feel the need to come out.

While Central, West, and South districts have the highest number of containment zones currently, the North-East and East districts have just 255 and 110 sealed areas, respectively. The North-East district, in fact, had no containment zones for the last 20 days or so.

Covid-19: Stable positivity rate

Covid-19: Stable positivity rate indicates pandemic peak has arrived in Delhi, says Satyendar Jain(The Times of India:20220406)

Health minister Satyendar Jain on Wednesday said the city’s positivity rate and number of hospitalisations have remained stable for the past few days, which could indicate that the pandemic’s peak has arrived.

“For the past few days, close to 20,000 cases are being reported daily in Delhi and the positivity rate has consistently been around 25%. Apart from that, the number of people admitted to hospitals is not increasing,” Jain said.

“I hope the peak ends as soon as possible, and that cases in Delhi and the country reduce,” he added.

The minister said 2,209 of the total 14,621 beds reserved for the treatment of Covid-19 patients are occupied currently while 12,412 are vacant. “This means 85% of the beds are still available. Delhi government has made plans to add more, if necessary,” he said. The minister added that there are very few cases of Covid patients being admitted to ICUs.

While Delhi on Wednesday recorded 27,561 new cases with a positivity rate of 26.22%, the average case addition in the past five days stands at 22,183.6, with a positivity rate of 24% during this period. So far in January, the capital has reported 133 Covid-19 fatalities, 40 of them on Wednesday.

Jain said as per the new guidelines of Indian Council of Medical Research, if a person does not have any symptoms of Covid, is under the age of 60 and does not have any comorbidity, he or she does not need to get tested.

At the same time, the minister urged people to follow Covid-appropriate behaviour, saying that the only real defence is caution. Calling upon citizens to wear masks and maintain social distancing in public places, he said even though bed occupancy in hospitals may have stabilised, people should adhere to the guidelines so that the spread can be controlled as soon as possible.

Jain also said that the government is keeping an eye on the situation and restrictions are being put in place on a regular basis to try to keep the virus at bay.

Delhi government had on Tuesday issued an order requiring all private offices to work from home. All restaurants and bars have also been closed and only home deliveries and takeaways are allowed. Apart from this, a weekend and night curfew from 10pm to 5am is also in place, during which all establishments are closed, except for essential services.
Coffee

Shun cigarette as coffee can make you poop too (New Kerala :20220406)

Not just cigarettes, but coffee can also make some people poop as a team of researchers has suggested that in some cases, coffee can jumpstart their bowel movement. View it at https://www.newkerala.com/news/2022/50377.htm

Cancer treatment

Study finds how cancer treatment affects nutrition (New Kerala :20220406)

Researchers have found that individuals living with cancer often experience nutrition-related side effects from cancer treatment, including changes in taste. View it at https://www.newkerala.com/news/2022/50305.htm

Childhood obesity:

THC, CBD exposure in womb linked to childhood obesity: Study (New Kerala :20220406)

Pregnant women who were exposed to cannabis products that contained THC and CBD were more likely to have children with increased fat mass and blood s. View it at https://www.newkerala.com/news/2022/50197.htm

Alzheimer's

Loss of neurons makes Alzheimer's patients drowsy: Study (New Kerala :20220406)

According to a recent study, the drowsiness that many Alzheimer's patients experience are caused not by a lack of sleep, but rather by t. View it at https://www.newkerala.com/news/2022/50129.htm
कोरोना की पहली और दूसरी दवा के दौरान...

डॉक्टरों की सलाम के बिना 68.2% लोगों ने विटामिन सी की दवा ली: सर्वेक्षण

572 लोगों ने प्रतिरोधक क्षमता बढ़ाने के लिए सोशल मीडिया पर किया भरोसा

भास्कर न्यूज़ | नई दिल्ली

कोरोना की पहली और दूसरी दवा के दौरान डॉक्टरों की सलाम के बिना और सोशल मीडिया पर गलत सूचनाओं के लिए अपने नजरहंगाम को बढ़ाने के लिए कई लोग ने 68.2% फीसदी लोगों ने विटामिन सी की दवा का सेवन किया था। जबकि 61.4% प्रतिशत लोगों ने जिसकी खुफियाँ नहीं थीं। मसलना में अदरक का प्रयोग 62.9 प्रतिशत और लहसुन का प्रयोग 50.9 प्रतिशत लोगों ने किया। इसके साथ ही कादां 28.8 प्रतिशत और महसूस ऑफ दवा का सेवन 28.1 प्रतिशत लोगों ने किया। कोरोना के दौरान 71.9 प्रतिशत लोगों ने ख्यातनामा का सेवन करते हुए ज्यादा किया। ऐसे लोगों ने अपनी रोग प्रतिरोधक क्षमता बढ़ाने के लिए किया था। यह बात भारतीय आयुर्विज्ञान अनुसंधान परिषद (आईएसएमसी) के राष्ट्रीय पौरोष्पण संस्थान के लिए गई एक अध्ययन स्वरूपकार में सामने आई है। अध्ययन में पाया गया कि कुल 572 लोगों में से अधिकांश ने प्रतिरोधक क्षमता बढ़ाने के लिए कोरोना से जुड़े सूचनाओं को प्राप्त करने के लिए सोशल मीडिया पर भरोसा किया था।

हालांकि, कोरोनावायरस संक्रमण के प्रभावित होने वाले लोगों ने जानकारी के लिए डॉक्टरों और स्वास्थ्य केंद्रों पर अधिक भरोसा करने की बात कही। इस संबंध में राष्ट्रीय पौरोष्पण संस्थान के अध्यक्ष डॉ. हेमा तारा का कहना है कि जल्द की प्रकाशित होने वाली अध्ययन इंस्पेक्ट मानव थॉमस-19 इन्फॉर्मेंट्रल ओवर द फूड एंड न्यूट्रिशन, फिटनेस एंड पर्यावरण, प्रैक्टिसेस एंड रिलायबिलिटी ऑफ दर सोर्स ऑफ इन्फेंमेशन अनमन इंडियन इंटरनेट द्वारा स्वास्थ्य जानकारी के साथ-साथ उपयोग के रेखांकित करता है।

सर्वे में उल्लेखित जानकारी में पाया गया कि लोगों ने घर के खाने पर ज्यादा विश्राम किया और बाहर के खाने में कमी की। सर्वे में यह पता चला कि 60 फीसदी लोगों ने बाजार की जगह घर में बना हुआ खाना खाया।