



Clinical Connect

Fostering a culture of innovation and excellence

Combatting COVID

Lessons from
across Fortis

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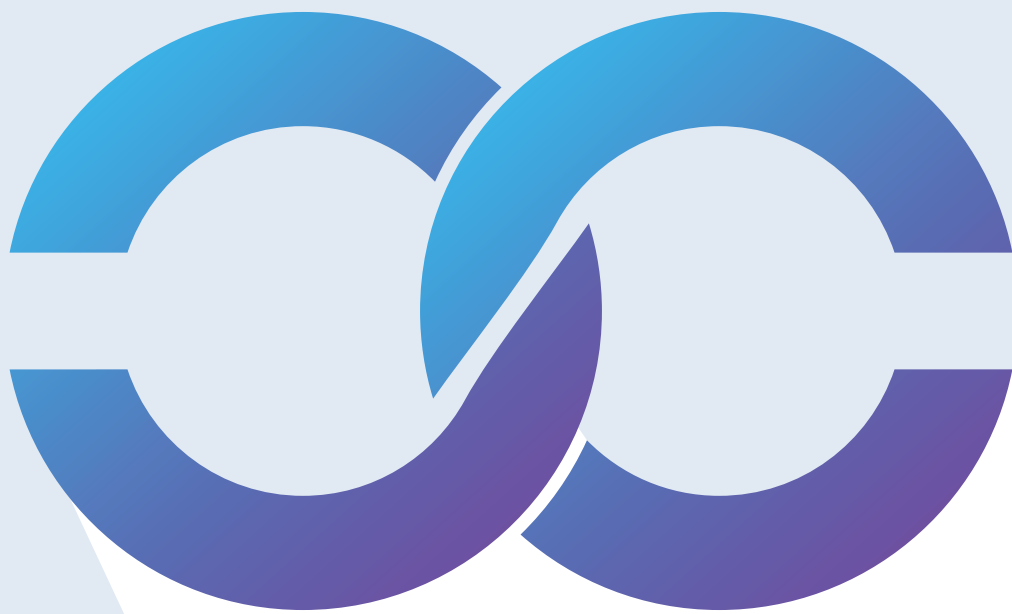
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INSPIRATION

Message from Dr A. Raghuvanshi, MD & CEO



Dear Colleagues,

It gives me great pleasure to share my thoughts with you through this inaugural issue of **Clinical Connect** a

bi-monthly publication dedicated entirely to the clinicians and the clinical activities across the Fortis network.

As a premier healthcare organisation, our success depends on the success of our Clinicians. It is therefore important to share knowledge, present innovative ideas and recognise talent. **Clinical Connect** is an attempt to do all of these whilst also showcasing the fine clinical work being done by our doctors and nurses across the country.

I congratulate the Editorial Team of **Clinical Connect** for this laudable initiative. I am sure that this

much-needed publication will be a beacon of light and usher in greater cohesion, encourage teamwork and instil a sense of pride amongst all of us.

I am certain that the publication will benefit from the clinical acumen and vast collective experience of our Senior Clinicians and the Fortis Medical Council members, and that their constructive feedback, comments and suggestions will guide its journey towards excellence.

Congratulations and good wishes once again!

Message from Dr Bishnu Panigrahi, Head – MSOG



Dear Colleagues,

I would like to thank the **Clinical Connect** team for conceptualising and publishing this inaugural issue of **Clinical Connect** – the Fortis Clinical Newsletter.

The Fortis network of hospitals boasts of the best Talent Pool of Doctors and it is important that the exemplary work being done in clinical care, research and academic domains gets

shared within and outside the organisation. **Clinical Connect** will help strengthen communication on clinical matters, showcase our talent and expertise, and provide an opportunity for clinicians to get know their colleagues and the work being done by them at the various Fortis units. Further, **Clinical Connect** will also help in cross-pollination of ideas and good practices.

In today's times, it is important to talk about the good work being done and share it with larger clinician community, referrers and well-wishers, to make them aware of the creditable work being done in our hospitals. **Clinical Connect** provides us a powerful tool to do so.

I look forward for this platform to be used by clinicians across our network to share and learn from each other, and to showcase to internal and external readers the good work being done at our hospitals.

Congratulations to the Editorial Team, our Senior Clinicians and Fortis Medical Council colleagues for their support and guidance.

Message from Dr Ashok Seth, Chairman – Fortis Medical Council, Fortis Escorts Heart Institute, New Delhi



Dear Colleagues,

On behalf of the Fortis Medical Council, it gives me great pleasure to present to all, the **Clinical Connect** a bi-monthly platform connecting Clinicians of Fortis Healthcare through science, academics and excellence.

We have often discussed the merits as

well as challenges of a Fortis Healthcare Medical Journal. This is the first unique and informal step in that direction. Our organisation has many of the finest clinicians of the nation who are renowned nationally and inter-nationally for their expertise, excellence and scientific contributions. Through **Clinical Connect** we hope to share this not only amongst each other within Fortis Healthcare but also with many clinicians and practitioners in the community. This platform would also help to know and better understand each other's expertise and contributions and help to leverage clinical strengths within our network to deliver the highest levels of outcomes to our patients. In time, it would also develop into a forum for scientific expert reviews, disseminating Fortis guidelines or consensus statements,

collaborative research, trials, training and proctoring, introduction of new procedures and skills and pooled data analysis and presentations. It would also be our forum to know each other better, appreciate our professional accomplishments, maybe even understand our hobbies skills and talents beyond the profession; so important in this virtual world where personal interaction with each other is limited.

The **Clinical Connect** newsletter is being led by a very powerful and passionate Editorial Team whose vision will form the basis of this extremely valuable platform.

We hope you will find this first issue, related to our fight against COVID, useful and informative.

I request all to contribute, collaborate and connect to make OUR **CLINICAL CONNECT** a great success!

Message from Mr Anil Vinayak, Group COO



Dear Colleagues,

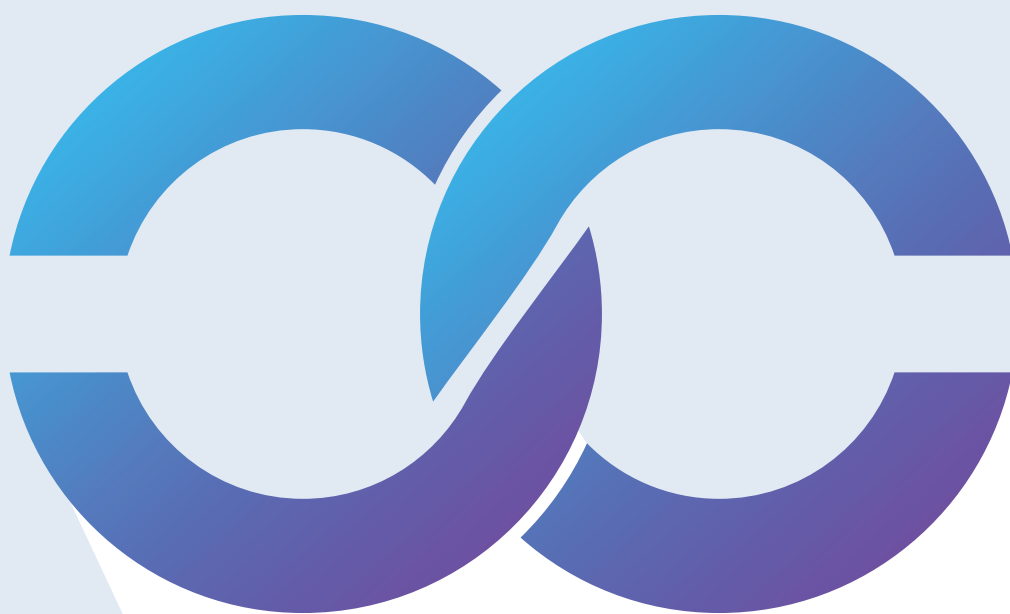
I congratulate the entire clinician community across Fortis on the launch of the **Clinical Connect** a newsletter

that aims to bring together all our clinicians on a single platform. To the best of my knowledge, Fortis is the only private sector healthcare organisation in the country to have such a dedicated in-house publication, which is quite commendable.

The bi-monthly magazine will present a wide variety of content that would be of interest to Clinicians. It aims to provide a platform to our Clinicians to discuss and deliberate upon various topical and scientific issues that are of interest to doctors. I am sure that the newsletter, which is being curated and produced by a very respectable and eminent Editorial Board, will be

informative, engaging and enlightening for the Clinician community across the Fortis network and will live up to the expectations of the audience it is meant for.

Congratulations to everyone involved with this project for the launch of this important initiative, and best wishes for its success.



FROM THE
EDITORIAL TEAM

From The Editorial Team

PATRON



Dr Bishnu Panigrahi

EDITORIAL TEAM



Dr Gourdas Choudhuri



Dr T S Mahant



Dr Niti Raizada



Dr Sushmita Roychowdhury



Dr Rahul Pandit



Dr S. Narayani



Dr Ritu Garg



Dr Narayan Pendse

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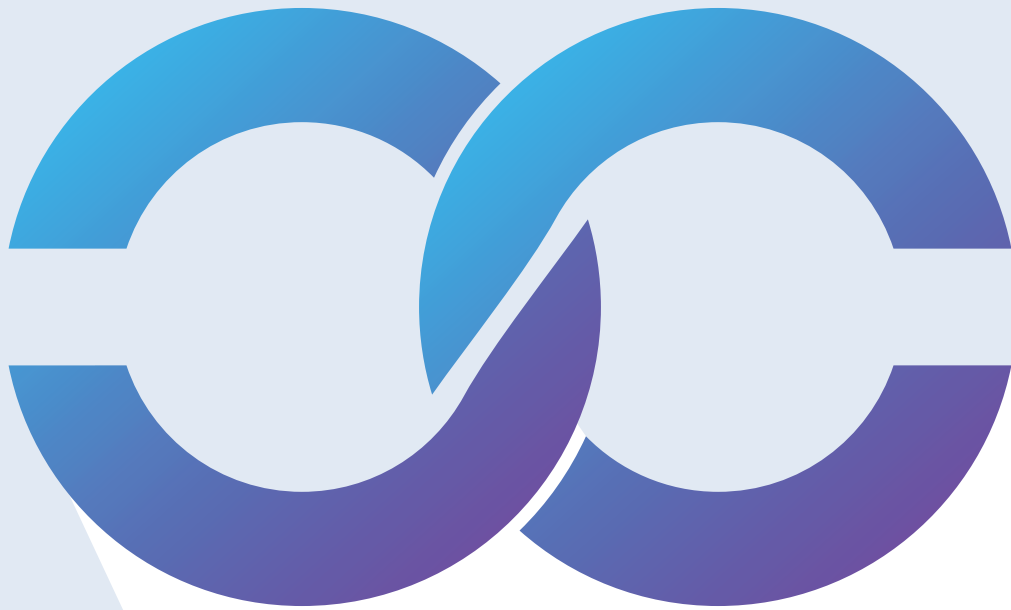
Mr Debasish Chakraborty

History will refer to the period from 2019 to 2021 as the COVID era. It will be remembered as the watershed period that bore testimony to the way that human behaviour patterns changed, the pattern of health concerns shifted and acceptance of technology emerged; with online transactions not only becoming acceptable but rather preferred. The social changes that emerged translated into adaptation by all industries, especially the healthcare industry, to not only treat and control the pandemic but also ensure safety of all stakeholders at all times.

This inaugural issue of **Clinical Connect**, the Fortis newsletter, covers the excellent clinical work being done at our hospitals, and is an acknowledgement of the resilience, fortitude, empathy, grit and innovativeness of our clinical, administrative and leadership teams – qualities which helped Fortis fight the war against COVID-19. We have collated articles to showcase the Fortisian 'never say die attitude' which helped us emerge successful in our battle against the dreaded virus. You would agree that it is impossible to share all the stories of the remarkable

individual contributions and teamwork in a single newsletter; these articles are a tribute to acknowledge and appreciate the effort made by each member of the Fortis family.

Future issues of **Clinical Connect** will continue to focus on pathbreaking work done by all clinical specialties. We look forward to constructive feedback and suggestions, to ensure that we make the newsletter more robust and representative of the incredible clinical work being done by clinical teams at our hospitals.



SPECIAL FEATURE

The COVID Experience: Personal and Professional

- Coronavirus, once in a life time opportunity - chaos and everything in between - *Dr Rahul Pandit*
- Fortis COVID Expert Group - *Dr Sushmita Roychowdhury*
- COVID Ready - *Dr S. Narayani*
- Dealing with the COVID Pandemic: The Administrative Perspective - *Dr Ritu Garg*
- My Tryst with COVID-19 - *Dr Kunal Punamiya*
- Mental Health During COVID - *Dr Samir Parikh*
- Learning the Art of Arterial Puncture: Building Core Competencies Among Nurses - *Ms Minimole Varghese*
- The COVID-19 Playbook - *Dr Murali Chakravarthy*

Coronavirus, once in a life time opportunity—chaos and everything in between



Dr Rahul Pandit
 Director - Critical Care
 Fortis Hospitals, Mumbai

Freakish and Embryonic

In the last week of January 2020, I had the opportunity to attend the annual national conference of the Intensive Care Society. Over 4,000 Intensivists from around the world had gathered to deliberate upon various scientific and clinical aspects of Intensive Care Management during the three-day academic fest. At the conference, I heard colleagues from South-east Asia expressing concerns about a new virus from Wuhan, which was causing serious problems in China. They feared that the disease would turn into a pandemic. Though the possibility was disturbing, I convinced myself that the virus would not come to our shores. The thought of a pandemic, however, was sown in my mind.

The Indoor Battlefield - The Ahh...Moment

Back in Mumbai, all through February, it was business as usual. By the first week of March, the events began unfolding with grim fury. Soon, we realised that a pandemic of unprecedented proportions was inevitably heading our way.

There was a flurry of activity as the Government swung into action. Suddenly, I found myself attending high powered meetings with Government officials and doctors from the Epidemiology Cell, discussing strategies to tackle an outbreak. At one of the initial meetings, I realised that the battle against the devastating virus would be fought in the Intensive Care Units (ICUs) or the High Dependency Units (HDUs) of the hospitals. The ICU teams had to gear up to fight an unknown enemy – something we were totally unprepared for.

The experience of doctors from China, the available scientific material and the not-so-encouraging social media posts made me realise why I was being invited to the high powered meetings. Although the National Intensive Care Society has a large membership base, only a handful of us senior clinicians exclusively practise ICU work. This pool would play a major role in managing the pandemic, I reckoned. I chinned up and decided to turn this adversity into a once-in-a-lifetime opportunity of battling a pandemic (the last one had struck a century ago!).

The Preparation

The thought of infectious diseases brings Tuberculosis – which is now endemic – or the more recent H1N1 outbreak to our mind. Neither of these have posed a challenge to the existing healthcare infrastructure or to the medical professionals. But COVID-19 (yes, it had a name now!) was a completely different beast. Both, the public as well as the private hospitals, needed to quickly prepare for screening, admitting and treating a large number of patients. This was a

formidable task, considering that even a metropolis like Mumbai had only one Government-run Infectious Diseases (ID) hospital, which obviously could not take on all the load alone.

A beginning was made by conducting an assessment of the existing infrastructure. Given the highly contagious nature of the virus, the experts found the facilities inadequate, our hospital included. We formed a Quick Action Team to create a 'hospital within the hospital,' with separate entrances and corridors. This was to ensure complete segregation of the patients. Standard Operating Procedures for the safe use of common services such as the CT scan or MRI were implemented. The biggest challenge was training the healthcare workers, educating them about the personal safety protocols and motivating them to continue to work by addressing their fears. Most importantly, we took into account the fact that the efficiency of a healthcare worker dropped by 20% - 30% when the PPE suit was donned.

We took up the challenge of alleviating the confusions, fears and trepidations of our healthcare workers, many of whom offered genuine or lame excuses to escape work. I cancelled my planned travel to Australia around the same time, partly because of the lack of clarity regarding international travel and the lockdown, but most importantly because I was needed here. Recognising my extensive experience with intensive care work, the Maharashtra Government appointed me as a member of the Task Force for COVID-19, to guide the State machinery in managing Critical Care during the pandemic. The journey

promised to be adventurous, as the disease was new and unknown. Our task was clear – to ensure that the virus challenging mankind is contained by optimally deploying the existing resources.

I adopted a multi-pronged approach – learn, educate, disseminate and learn again from experience. My interactions with doctor colleagues from China and South-east Asia, who were dealing with COVID-19 patients, gave me crucial insights. I also relied on the time tested basics of ICU care, established through vigorous clinical trials. Educating fellow colleagues, disseminating knowledge among the Intensive Care community and re-learning from each others' experiences became the norm. Simultaneously, we also made a lot of educational videos, information sheets and programmes for the common people. Webinars, I realised, were a potent platform to share knowledge.

The first set of guidelines for Clinical Management published by the Task Force was well received and I became the go-to person for all COVID-19 related clinical matters. Our ICU received recognition as one of the best in the State and we continued to receive sicker and sicker patients. We also treated many important political and social personalities. Our ICU outcomes spoke for themselves. The press talked about it and the ICU admission became a much sought-after affair. Though life had come to a complete standstill for the common man because of the nationwide lockdown, we medical professionals had ever expanding work coming our way with each passing day.

Modus Vivendi – Way of Living

I thrived on the daily challenges. We needed to regularly expand our bed capacity as well as manpower.

As the electronic medium gained acceptance as a means of communi-

cation, ICU rounds were done on video calls to ensure the safety of the entire team. We spoke and counselled patients and their families on phone or through video calls. The families thanked us profoundly, even when a family member had succumbed. The trust on doctors, which had been on a downhill slide over the last few years, was finally being restored.

However, destiny works mysteriously. While we were in the thick of things, I came down with COVID-19. From being a care giver, I became a care seeker. My team members put their heart and soul in caring for me after I was admitted to the quarantine section of my own hospital. The fantastic nursing staff and the caring hospital management ensured a perfect hospital experience that any patient could have asked for. Yet, I struggled with an inner turmoil. The 14-day hospitalisation made me realise what patients feel. Everything was perfect, yet so much was missing. While we healthcare workers work really hard, the 'care' lacked the human touch. I pondered over this essential component and the bearing it has on the doctor-patient relationship. With healthcare workers wearing the PPE suits all around, patients feel like they are surrounded by extra-terrestrials. Even though I recognised every face behind the mask, I had felt lonely during those 14 days. Those two weeks were very tough for my family as well, given the uncertainties associated with the disease. They latched on to the tiniest positive update and rejoiced every time they learnt that I was recovering.

Tabula Rasa

Thankfully, I recovered and was back home soon. Within a few days, I was back at work as well. Armed with my new-found hospital stay experience, we revisited the entire system and the extant protocols with the aim of making them better and more

patient friendly. We began encouraging the patients to nurture their hobbies. Soon, the ICU became a very different place. One could find the patients playing flute or guitar or immersing themselves in drawing and painting. They got regular news updates about the world outside. The Dietician ensured that the food was tailored to their taste.

Small things made a big difference. I and like-minded persons participated in regular Facebook Live sessions every week, which were in English, Hindi or the regional languages. We responded to the frequently asked questions, comforted them and provided scientifically authentic information. Our to-do list was endless. Academicians, public figures such as politicians and actors, senior doctors and hospitals extended their support to these initiatives and many of us went an extra mile to spread awareness, which was our greatest weapon against the virus.

Soon, the country witnessed a change in the way information was being sought. Platforms with experts on board gained trust as sources of authentic and scientific information as opposed to social media forwards. Over time, we began to understand the disease better while the epidemiologists strove hard to control the pandemic. The policies were redrafted and implemented with agility, as per the situational demands. Although the frequent changes may have appeared chaotic to the lay person, there was a method to the process. As we got better with the process, the results began showing up.

The Genesis - Vaccine

Many virologists, mathematicians and clinicians had predicted how the virus would progress and when the wave would decline. Most got it wrong. Evidently, during every pandemic, the wave subsides after touching a peak.

COVID-19 followed the same pattern but with a difference. While the disease peaked during the winters in some European countries and in the American continent, the highest number of cases were recorded in India during the monsoon months. Towards the end of the season, the numbers began declining across the country.

Finally, life was looking bright again. The economy was returning back on track. For the share bazaar gurus, this was music to the ears and for the common man, it was a welcome opportunity to return to normal life. There were smiles on people's faces. Even though some families had lost their loved ones, people wanted to move on and start afresh. The authorities were happy, the people were happy and soon, it was the festive season. The wedding season followed and by now, almost everyone wanted to forget Coronavirus.

Meanwhile, the scientists were working hard to create a vaccine – the only effective way to defeat the virus. History has taught us that be it polio or smallpox, vaccination works. The world looked forward to the vaccine announcement and heaved a sigh of relief when it finally came through. We, as frontline medical professionals, felt as if a safety armour had arrived because while the cases were declining, patients continued to test positive and some needed intensive care. I sensed a small twinkle in my mother's and wife's eyes as the vaccination programme took off across India. They must have thought that at last, I would have some protection.

Tempus Fugit – Time Flies

As a healthcare professional, I was fortunate to be one of the first to get vaccinated. All media houses carried the news of vaccination drives prominently and 2021 started off on

a positive note. Then the news of a few complications post vaccine administration began emerging. Along with the virus we now had to deal with 'vaccine hesitancy,' a new term for me! We had to work hard to dispel doubts, be it at work, through the mainstream media or on social media platforms. The very basis of what looked like a game changer was being challenged. Hard work from several quarters and a push from the Government and the scientists finally got the vaccination programme back on track.

Unfortunately, we do not take learnings from history seriously. The Spanish Flu pandemic of the last century had clearly demonstrated that a second wave was imminent. However, the message was lost as we patted our own backs and congratulated ourselves on how we had successfully contained the pandemic.

While we ignored history, the experience of the European countries with the second wave should have alerted us. Neither the authorities, nor the doctors were expecting what awaited us. Before we knew it, a ferocious second wave had hit us hard.

In a span of just six to eight weeks around February 2021, India was reeling with a significant number of COVID cases again. The numbers climbed with alarming rapidity, stretching our healthcare system to its limits. There was a shortage of lifesaving oxygen and drugs, and it almost felt like *deja vu*. In the midst of this second wave, we were fire fighting for lifesaving essentials. While some cities and States were much worse than others, some started to show improvement early and recovered completely. Everyone hoped that the second wave would vanish as quickly as it had appeared. Again, the mathematical models predicted a 100-day cycle. While the wave did decline in North India, it continued to

persist in Maharashtra and touched new peaks in some Southern as well as North-eastern states.

The country was badly ravaged by the second wave. To ensure that people are never deprived of the healthcare facilities and essential lifesaving drugs or oxygen, the Honourable Supreme Court of India appointed a committee of 10 experts from across the country, including me, to guide and formulate a plan for pandemic preparedness, with a special focus on oxygen. Over the next few months the committee worked extensively on improving oxygen production, transport and utilisation, apart from several other aspects of improving our pandemic response. The committee also advised the Government about measures to mitigate a third wave and expedite the vaccination programme across the country.

As we enter a phase where the positive cases have reduced and the second wave has subsided, we are still waiting for the world to be free from the clutches of COVID-19. The possibility of a third wave continues to haunt us. I believe that with the administration of over 100 crore vaccine doses, we are now better prepared for the third wave, if any, and hope that the healthcare infrastructure does not get overwhelmed with too many cases ever again.

Let us pledge that we shall not let the guard down. The mantra will continue to be 'Mask up, maintain social distancing, practise hand hygiene and take the vaccine jab.' The Government will need to step up surveillance, testing, tracing, treating and micro containment more strongly than what they did when the wave was active. And, while the Government definitely needs to invest more in healthcare, let us also behave as responsible citizens of our wonderful country.

Jai Hind!

Fortis COVID Expert Group

Dr Sushmita Roychowdhury
Director - Pulmonology
Fortis Hospital, Anandapur, Kolkata

The COVID pandemic was unexpected, all-encompassing and devastating. The health services all across the globe took on the mammoth task of not only treating a vast number of very sick COVID patients but also keeping non-COVID services running as smoothly as possible.

The most difficult task was providing evidence-based treatment guidelines in a uniform, protocol-driven manner to all our group hospitals across the country. This, however, was necessary to ensure optimal utilisation of healthcare resources during the pandemic. The war-like scenario required every healthcare worker,

including doctors, nurses, paramedics, administrators and frontline workers, to take the challenge head-on.

In this backdrop, Dr A. Raghuvanshi, MD & CEO, announced the formation of a policy-making body, the **COVID Expert Group**, headed by the Group Head - MSOG, on October 1, 2020. The Group functions in collaboration with the Fortis Medical Council (FMC) with the objective of providing directions for combatting the coronavirus pandemic and providing the necessary guidance, help and support to our hospital units.

The Group holds online meetings at least twice a month, sometimes more frequently. It helps formulate organisation-wide guidelines in

keeping with the National recommendations, updates treatment protocols as the evidence evolves and handles queries regarding the best hospital practices in times of COVID, in both the OP and IP settings. The Group also suggests ways and means of ensuring staff safety.

The experience sharing across the network has resulted in a uniform approach towards handling the pandemic. We continue to hold meetings to assess and modify our response as the pandemic gradually ebbs into an endemic.

As a member of the Group, I have learnt from my co-members, shared experiences and gathered strength to fight the virus with the best scientific armamentarium we have.

The COVID Expert Group



Dr Anoop Misra
Executive Chairman,
Fortis CDOC, New Delhi



Dr Sushmita Roychowdhury
Director - Pulmonology,
Fortis Hospital, Anandapur, Kolkata



Dr Rahul Pandit
Director - Critical Care,
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Dr Bishnu Panigrahi
Group Head, Medical Strategy
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Mr Anil Vinayak
Group Chief
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Mr Ranjan Pandey
Chief HR Officer



Dr Ajay Dogra
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Dr Akash Sud
Medical Strategy &
Operations Group



Dr Lavina Jain
Medical Strategy &
Operations Group

COVID Ready



Dr S. Narayani
Head – SBU, Mulund

Eighteen months ago, the challenge was, how do we get COVID ready?

Today, the once unknown monster that unleashed a devastating COVID pandemic across the country, is rapidly becoming endemic. It is here to stay, but we know how to rally our forces against the virus. We now have better understanding, less apprehension and greater nimbleness to deal with it.

But March 2020 was different. Our biggest challenge back then was how to get the hospital COVID ready. The four key areas we worked on were:

- Segregating the COVID flow, starting from ER to OPD to In-patient areas. The flow of these patients had to be separate with no interface with the non-COVID zone.
- As a large community hospital, we needed to continue to be available for the significant load of non-COVID emergencies.
- We needed to have a workforce that was motivated and stayed motivated – fearless, updated on the ever-changing treatment and sanitisation protocols and in sync with several other guidelines.
- Above all, we had to ensure the

safety and welfare of the front-line workers.

Fortis Mumbai was able to achieve all of these and contribute wholesomely to COVID care. The infrastructure of the hospital was bifurcated into two completely independent sections, almost as if they were two independent hospitals operating under one roof. Taking advantage of the architectural design of the hospital, we created a COVID division with over 100 beds, 30% of it being ICU and 70% being ward beds. We had independent screening, OPD and testing centres. This segregation allowed us to operate almost 200 beds in the non-COVID care section.

On Day One, a dedicated team of clinicians from the ER, Infectious Diseases, Critical Care and Internal Medicine came together to form a core team. They were supported by members drawn from the Nursing Team, the Paramedical staff and the Engineering Team. In partnership with the leadership and the hospital management, this composite team took charge of keeping the protocols updated in the ever-changing scenario. The team members were dynamic, knowledgeable and aware. They participated in the clinical research activities whilst delivering

excellent clinical care. Under the leadership of this team, a second and a third team of clinicians were also created to handle the extensive load. All of them followed a standardised care protocol.

The staff members, to start with, were housed completely in the hospital. They were equipped and supported in every way as they went out to battle. Simultaneously, a home care vertical was also launched along with tele-consultation facility for patients who did not need to visit the hospital.

As I recall our response to COVID, I am filled with a sense of pride and gratitude. Collectively, we were able to treat over 4,000 COVID patients and touch many more lives with a significant positive impact. The key to our success was complete commitment, dedication and agility to constantly respond to the ever-changing situation and treatment requirements, right up to the vaccination stage.

The experience came in handy, enabling us to deliver on the vaccination front with a similar team and infrastructure adaptation. However, even as COVID recedes today, we have not dropped our guard and are ready to bat just as fervently, should the need arise.



Dealing with the COVID Pandemic: The Administrative Perspective



Dr Ritu Garg
 Head – SBU, Fortis Memorial
 Research Institute

The COVID-19 pandemic is clearly an unprecedented and devastating event of the century. It has adversely impacted almost every household across the world in some way or the other. It has caught everyone unawares and unprepared. The most affected of all are the healthcare facilities where this war is being fought day in and day out for almost 20 months now.

From an administrative perspective, the foremost challenge was to be able to adapt quickly in terms of infrastructure needs based on the dynamic COVID situation, keep pace with the frequently changing Government regulations and clinical protocols and ensure the safety of the teams and our patients.

The key is to always remain abreast of the situation, pre-empt based on trends, take quick decisions and ensure that the entire team is aware of and aligned with the new developments.

The last wave in April, caused by the Delta variant, was the most catastrophic. We were all inundated with incessant 24/7 calls and the sheer helplessness and inability to

provide beds for the needy was overwhelming. It was marked by sleepless nights for fear of running out of oxygen with hundreds of lives at stake. I remember the night when we were about to run out of oxygen and the tanker assigned to us was diverted to another hospital. We were on the roads of the city at midnight, trying to locate the tanker and ultimately had to seek police intervention to escort the tanker to the hospital. Many other hospitals would have similar stories to relate.

We remained afloat only because we worked closely with all our external stakeholders, be it Government officials, industry bodies or task forces. At the time of the oxygen crisis, we did manage to get additional support from some industrial organisations, which helped augment the constrained supplies. Similarly, keeping the authorities informed in real time about the situation on ground helped avert a major crisis.

The constraints were not limited to oxygen alone. Soon, it was about medicines such as Remdesivir, Tocilizumab and Amphotericin among others. However much prepared one could hope to be, there was no way to procure all of these, except through a tortuous process of obtaining case-based approvals from

the authorities. Here again, close interaction with the authorities and being able to explain the criticality of the case did help expedite the process. We had to be dynamic on inventory levels and we decided that it was better to err on the side of oversupply and have some extra stocks at hand.

Trained manpower at times of crisis was the biggest challenge. We did extensive training to upskill staff and add support helpers to assist our nursing staff in wards. Creating a trained mobile bench strength at a city or the country level can go a long way in partially mitigating such a surge in any region.

The well-being of the teams on ground is critical. We ensured that each of our staff member was well looked after and had all the support available. We ensured that our COVID warriors had well stocked demarcated areas where they could take a break, have refreshments and relax.

The past year has been about resilience, collaboration, teamwork, agility and building inherent strength to deal with any crisis. Umpteen inspiring stories unfolded on the ground each day in hospital wards and ICUs, and will continue to do so in times to come.



My Tryst with COVID-19



Dr Kunal Punamiya
 CEO - SL Raheja Hospital -
 A Fortis Associate, Mumbai

We heard it first in the news. We thought it would not hit us. While it kept spreading elsewhere, we were still sure that it would not hit us here in India. And then we learnt about a case in Kerala. Soon after, an acquaintance at the Municipal Corporation of Greater Mumbai (BMC) contacted me as she wanted to connect with the medical heads of a few city hospitals.

The first meeting had representatives from just eight Mumbai hospitals. As the number of COVID-19 positive cases gradually increased, the ask for a "commitment of a few beds" converted into a full-fledged take-over of the entire hospital. The pandemic had invaded our lives. Soon, the lockdown ensued.

After multiple planning, discussion and brainstorming sessions with our clinicians, we devised a strategy to separate the COVID and non-COVID wards, the ICU and the entrances. We were lauded for our methods of isolation and the treatment protocols by the Municipality officials, who shared these methodologies with other hospitals across Mumbai for implementation.

The BMC was shutting down hospitals if they found a single COVID positive patient in a non-COVID area. It was very stressful to hear these stories from

colleagues, as this could happen to anyone at any time. And then one day, it happened with us. Initially, we were scared as we did not know what our fate would be. But post our discussion with the Mayor and the BMC officials, it was decided that the hospital would not be shut down. It was a victory of sorts.

Six weeks passed without a single healthcare worker testing positive and an article about this was published in the newspapers. And then, it appeared as if someone had cast an evil eye.

One of our Chief Intensivists was the first to test positive. I was next, along with the Heads of our Critical Care, ER and Radiology and five others from the ICU and Marketing. All of us were admitted to the hospital on the same day. Away and isolated from our families, we initially helped out in the COVID wards, as all of us had only mild symptoms. Some of those outside envied us as they thought we were partying together. Many of our consultant friends sent food for us on a daily basis. Then the condition of our Head of Intensive Care worsened. I was next. We both got TCZ and were put on HFNC. He recovered, but I became a candidate for elective intubation. I managed to drop a message home before I was wheeled to the ICU and sedated.

I woke up after four days to find our Head of Critical Care on a screen in front of me, over a video call. He was fine and was headed homewards; he was just waiting for me to be extubated. The next six days were horrible for me as I was on the BiPAP. I could not breathe or sleep. And then, I started hallucinating. I remember a few things I did and I still get to hear the many other exploits of mine from the doctors and nurses. Two of my registrars really helped me to comply with the treatment. One of my nursing staff actually treated me like a kid and even sung lullabies to put

me to sleep. I found it difficult to eat or drink. My boss and my entire team would call me to encourage me and urge me to comply with the treatment. A few broke down. I avoided calling my family as I did not want my mom, daughter or wife to see me in that condition. But my family members were always in my thoughts and that's what kept me going during what were probably the worst days ever in my life.

I was taken aback as I saw the reflection on the mirror after I was shifted to the ward. I looked very weak and was unable to bear my own body weight. Food kept coming, some from home and some from a friend's place. But I could hardly eat. Friends and family kept calling and I kept breaking down every time I spoke with them. I remember a junior doctor coming up to me and telling me that I would be fine. I was finally discharged after 26 days. My dad and wife came to the hospital to pick me up. I was welcomed at my home as if I were a war hero. That was embarrassing.

I quarantined and rested at home for two weeks with just two outings, one for a follow-up and another to meet a friend. As I felt a little better, I approached my clinical team and my boss to allow me to return to work. I was determined to bounce back as that was the only way I could regain my lost strength. Strength, after all, is more a matter of the mind than the body and my mind wanted me to be back at work.

It took me another four months to get back to complete normalcy. In the meantime, we have learnt to live with and fight COVID, and emerge victorious. While the disease still continues to bother us, we have now grown smarter and know how to work around it. Personally, the experience has been life changing and has only helped me bond better with my family at home and my extended family at the hospital.

Mental Health During COVID



Dr Samir Parikh
 Director - Mental Health
 & Behavioral Sciences Fortis
 National Mental Health Programme

togetherness that we have been able to overcome these difficult times.

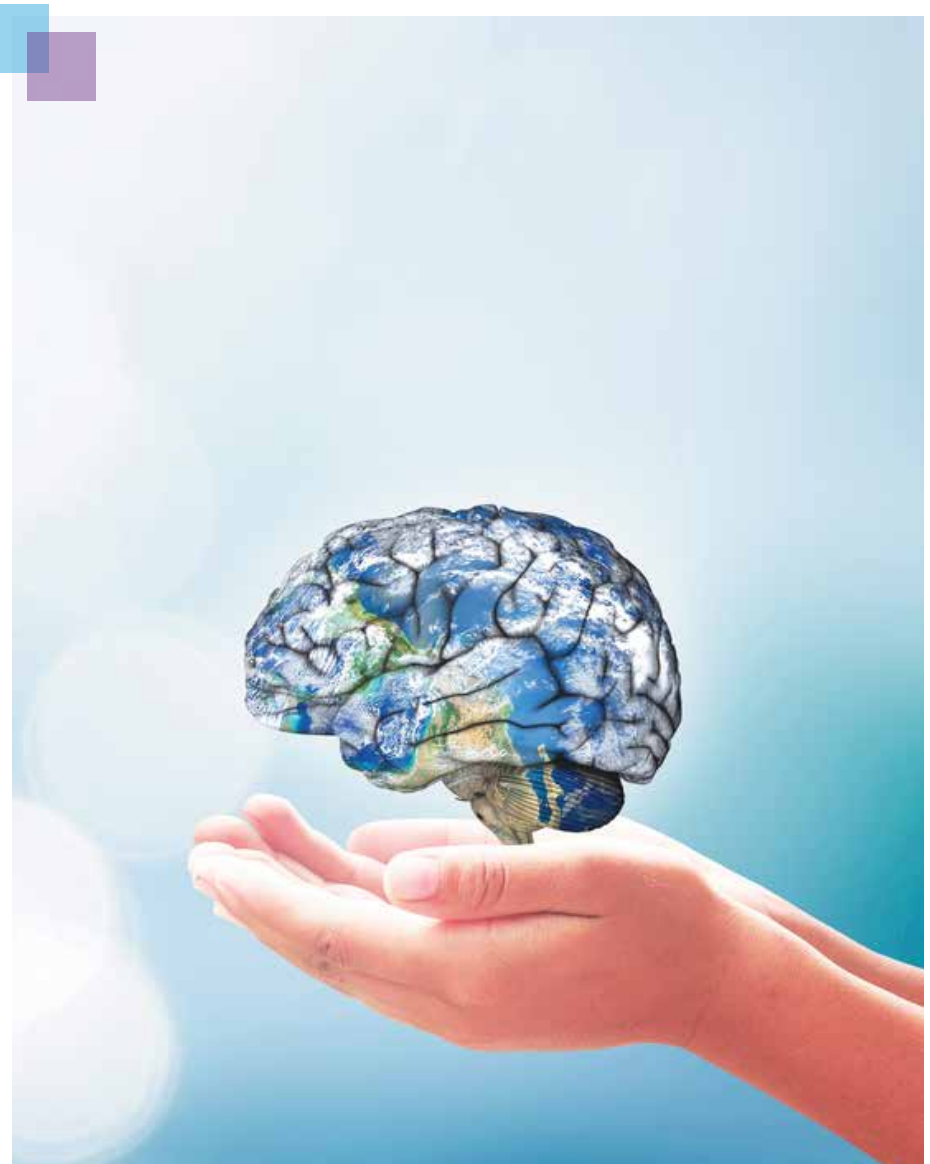
Emotional connectedness has been the greatest protective factor for mental well-being during this pandemic. It is important for all of us to reach out and stay connected to our support systems, even if we do it digitally. Maintaining a sense of routine and rhythmicity in daily life by establishing healthy work-life boundaries, staying physically active and investing in learning or rekindling forgotten hobbies are all effective tools. Most of all, finding a sense of meaning and purpose in these times –

to go beyond one's own self and be able to make an impact in the lives of others is what has mattered most.

To support communities and mitigate the mental health impact of the pandemic, the Fortis National Mental Health Programme has been conducting webinars for corporate organisations as well as schools. The themes revolved around mental well-being during COVID-19, managing work from home and parenting during the pandemic along with digital media initiatives promoting emotional engagement and collective social responsibility.

The impact of COVID-19 on our physical health is now well known. What has been a lot less spoken about is the mental health toll that the pandemic and resulting social distancing has taken on us. In these unprecedented times, we have all experienced varying degrees of anxiety – be it about our own health or those of loved ones, financial concerns or uncertainty regarding academics. The lockdown brought with it challenges of managing work from home, disruptions in routine, restrictions in physical movement and home schooling for students. This pandemic has been particularly difficult for the elderly, for whom managing day-to-day activities without support, reduced social interaction and the shift towards digital have been in some ways difficult to adapt.

That being said, we must also realise that the pandemic has brought us closer together than ever before. Over the last two years, we have all experienced loss. And it is this collective experience of the pandemic that binds us together. While we have been advised social distancing, it is only through our social connect and



Learning the Art of Arterial Puncture: Building Core Competencies Among Nurses



Ms Minimole Varghese
Chief Nursing Officer, Fortis Mulund

Traditionally, sample collection for ABG is performed by the doctors or trained ICU nurses. In the hospitals, ward nurses are neither privileged nor given specific training to perform ABG sample collection.

In the wake of the COVID pandemic, at Fortis Mulund, when the footfall of COVID patients increased May 2020 onwards, an average of 20 ABG sample requests were being received per day from the COVID ward. The burden of ABG sample collection rested on the shoulders of either the ICU doctors, the anaesthesiologist on call or the senior ICU nurses. The situation directed our attention towards utilising ward nurses working in the COVID ward for ABG sample collection and analysis.

With the aim of training and privileging 100% of ward nurses working in the COVID ward on ABG sample collection and analysis, thereby building core competencies and improving patient satisfaction, a structured clinician facilitated, nurses driven training programme on ABG

sample collection and analysis with OSCE (Objective Structured Clinical Examination) was implemented as a pilot, from June 2020 at Fortis Mulund.

Post implementation, 83% of the ward nurses performed ABG sample collection independently, with no reported delay in the delivery of ABG reports, as the ward nurses were able to perform ABG sample collection and analyse it independently in the COVID ward.

With the success of the pilot and with the aim of developing an advanced procedural skill among ward nurses to enable early clinical decisions, the programme is planned for further extension to other busy units with similar dynamics.



OSCE on ABG collection by COVID Ward Incharge



ABG sample processing done in COVID Ward



A COVID ward nurse performing ABG sample collection



Practical training on ABG sample collection



Ward nurses been trained on basics of ABG collection and analysis

The COVID-19 Playbook



Dr Murali Chakravarthy
 Director and Head - Clinical Anesthesia,
 Director - Clinical Affairs and Infection
 Control Fortis BG Road, Bangalore

The Spanish Flu of 1900s struck the human race at a time when medicine was relatively primitive. The world neither had critical care units or ventilators, nor effective vaccines. Despite these limitations, the human race fought the pandemic. Unfortunately, we are not aware of the medical tools and methods that were deployed then as there is very little documentation. In many ways, the COVID-19 infection resembled the Spanish Flu. The COVID-19 pandemic was also unprecedented, with its natural history, treatment options, therapeutic options and complications being unknown.

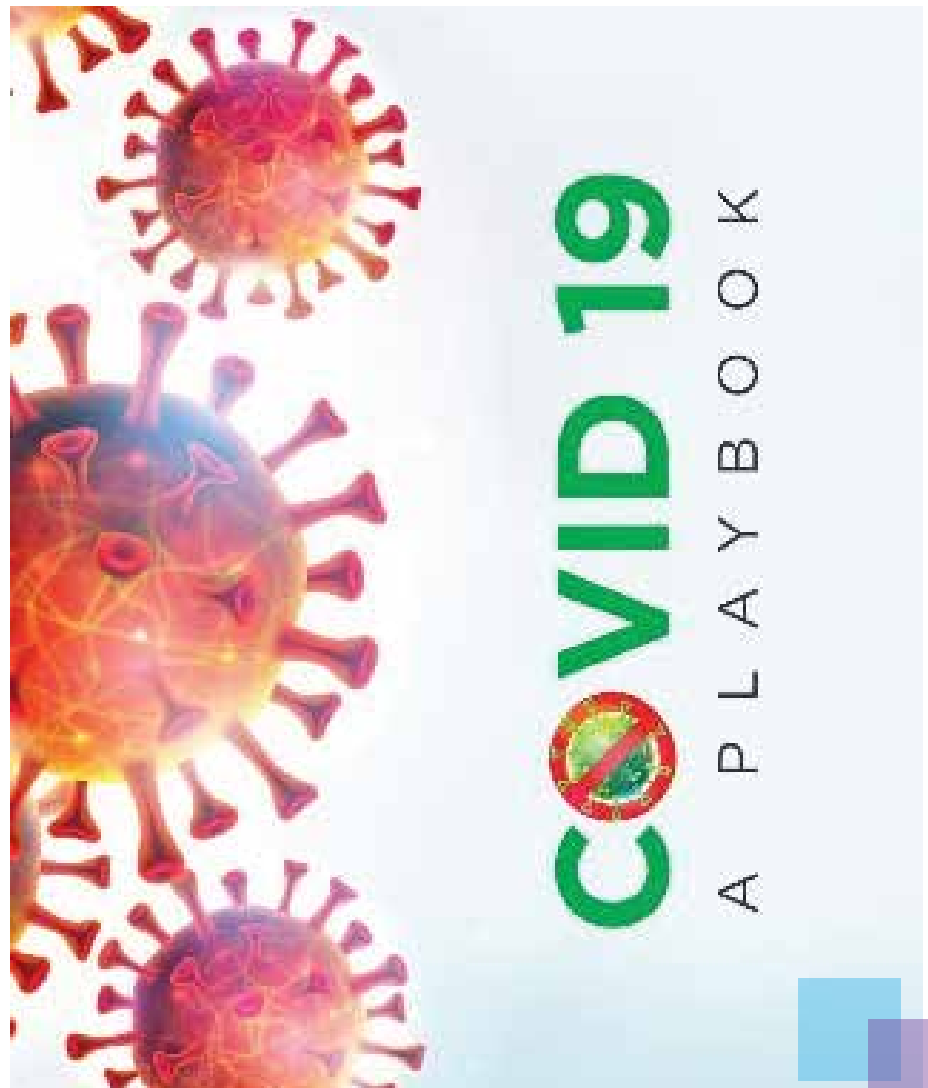
Humans, who are known to be resilient, innovated, experimented and created many solutions during the COVID-19 crisis too. Many of these innovations, such as creating personal protection equipment, preparing hand sanitisers in-house, re-sterilising N 95 masks, earmarking donning and doffing areas, creating isolated intensive care units, enhancing communication methods and adopting online consultations, were both, life and money saving. These innovations have helped us tide over the crisis. At Fortis Healthcare,

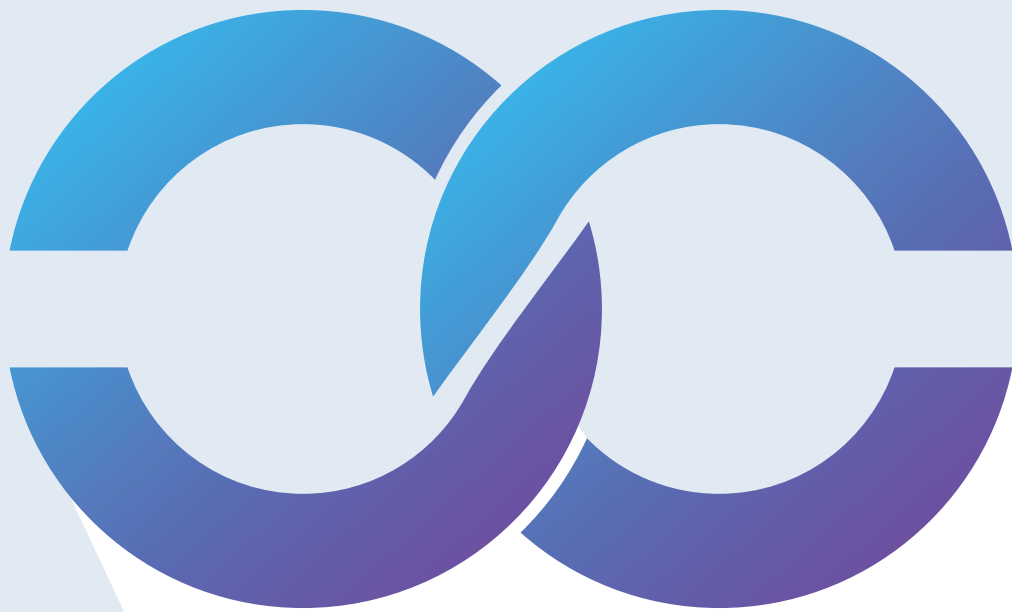
the lessons that were learnt were shared amongst units, so that everyone benefitted from these innovations. We fought Waves One and Two of COVID-19 with mixed outcomes.

However, all the changes and innovations that we created will soon become redundant once the COVID-19 infections subside. With these innovations being no more required, we might even forget the details of how we created these life-saving innovations. As the old adage goes, 'out of sight is out of mind'.

In order to document the innovations and make it available as a ready

reckoner for posterity, it was decided to create a 'Play Book' around the COVID-19 infections. The document is divided into 12 chapters that briefly cover the pathology, natural history, infrastructural changes and infection control aspects of how we dealt with the COVID-19 pandemic, besides other topics. This attempt is just the beginning. If the individual units find their innovations are not listed here, they are invited upgrade the Play Book by sharing those with the author. The comprehensive document, it is hoped, will be of great help, should a similar crisis occur in the future.





SCIENTIFIC EVIDENCE

Publication Synopsis

- COVID Antibody Cocktail Study -
Dr Rahul Pandit and Dr Narendra Pruthu
- Inhalation Therapy for COVID-19 -
Dr Anita Mathew

COVID Antibody Cocktail Study

Principal Investigators

Dr Rahul Pandit
Fortis Hospital, Mulund

&



Dr Narendra Pruthi
Fortis Hospital, BG Road

Initiated a promising study on COVID antibody cocktail sponsored by Roche at Mulund & BG Road. This therapy is approved by DCGI for emergency use. The therapy gained in popularity when it was used as part of the COVID-19 treatment of the former US President, Mr Donald Trump.

What is COVID Antibody Cocktail?

COVID cocktail is a mixture of two antibodies, Casirivimab and Imdevimab, and is used for the treatment of mild-to-moderate COVID-19 in high-risk patients. Casirivimab and Imdevimab are monoclonal antibodies – or laboratory-made proteins that mimic the immune system's ability to fight

off harmful pathogens such as viruses. Casirivimab and Imdevimab are specifically directed against the spike protein of SARS-CoV-2, designed to block the virus's attachment and entry into human cells.

Who is it for?

The cocktail is for the patients at high risk of developing severe disease. It is approved as a combined dose of 1200 mg (600 mg of each drug) administered by intravenous infusion or subcutaneous route. It has to be stored at 2°C to 8°C. High-risk includes patients over 60 and/or those who have various comorbidities, such as cardiovascular disease, chronic lung or kidney disease, diabetes etc.

Inhalation Therapy for COVID-19

Principal Investigator



Dr Anita Mathew
Fortis Hospital, Mulund

Mulund under PI - Dr Anita Mathew.

Research & Innovation involved with the therapy

There is preclinical and clinical evidence that the study drug is an effective and safe antiviral against SARS-CoV-2. It shows broader activity against a variety of respiratory viruses. The clinical results from the SG016 study demonstrates that the study drug - SNG001 - can be administered in complement to existing standard of care supportive therapy and with other therapeutic strategies and thus is an innovative therapy for the treatment of COVID-19.

Investigator opinion upon using the therapy

Present treatment protocols for COVID-19 are in the form of antivirals

with its limited role and antibody cocktail. These therapies are of use, if an early diagnosis is done and the patient is on oxygen. This study is for patients who require oxygen and have lower respiratory infection and so help in treatment of these patients to prevent their worsening and the need for high level immunosuppressant.

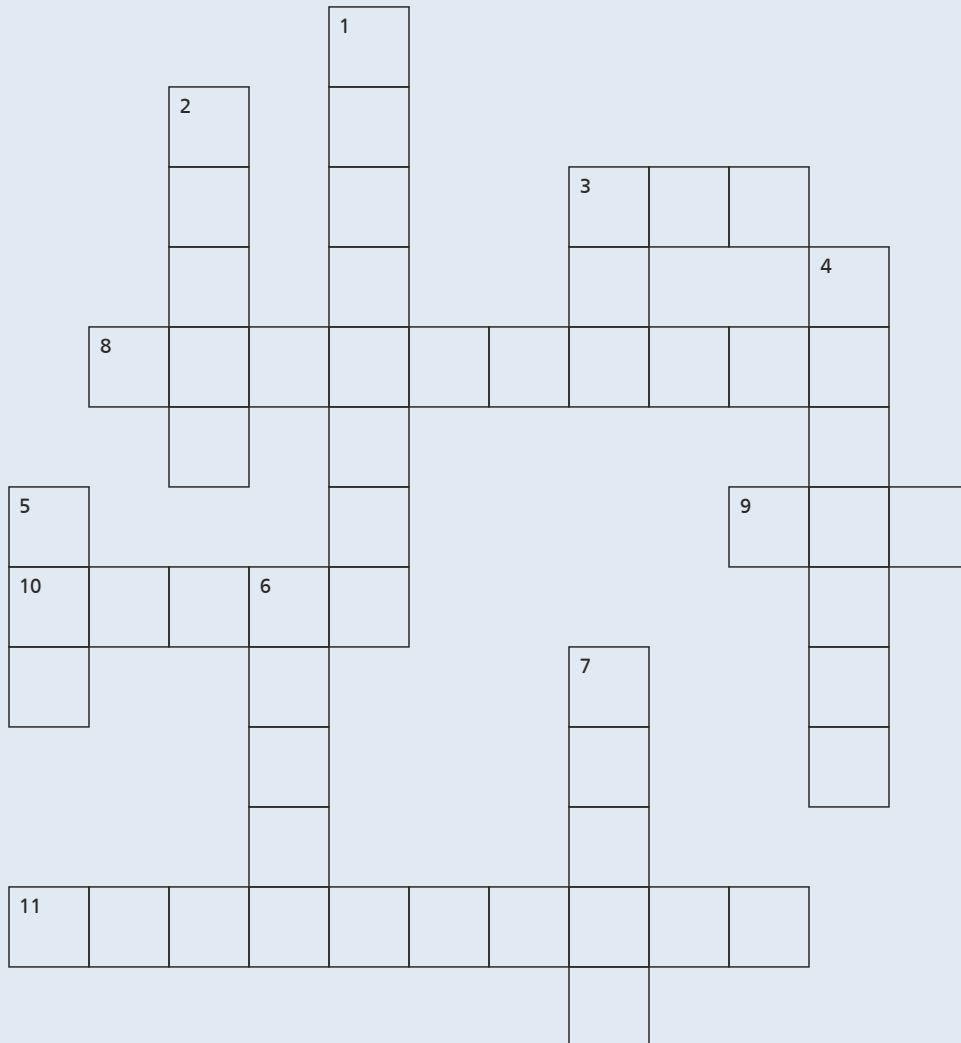
It basically delivers interferon (which is the normal body's response to viral infection and is suppressed in SARS-COV-2), to the lung directly with the help of nebuliser to help aid the body fight SARS better.

If the study shows significant benefit, then it will be another treatment option in the armamentarium of COVID-19, especially for patients with moderate disease, where there is lacunae in efficacious medication.

Recently initiated a randomised, double blind, placebo controlled, phase III trial to determine the efficacy and safety of inhaled drug for the treatment of patients hospitalised due to moderate COVID at Fortis Hospital

TRIVIA

Crossword

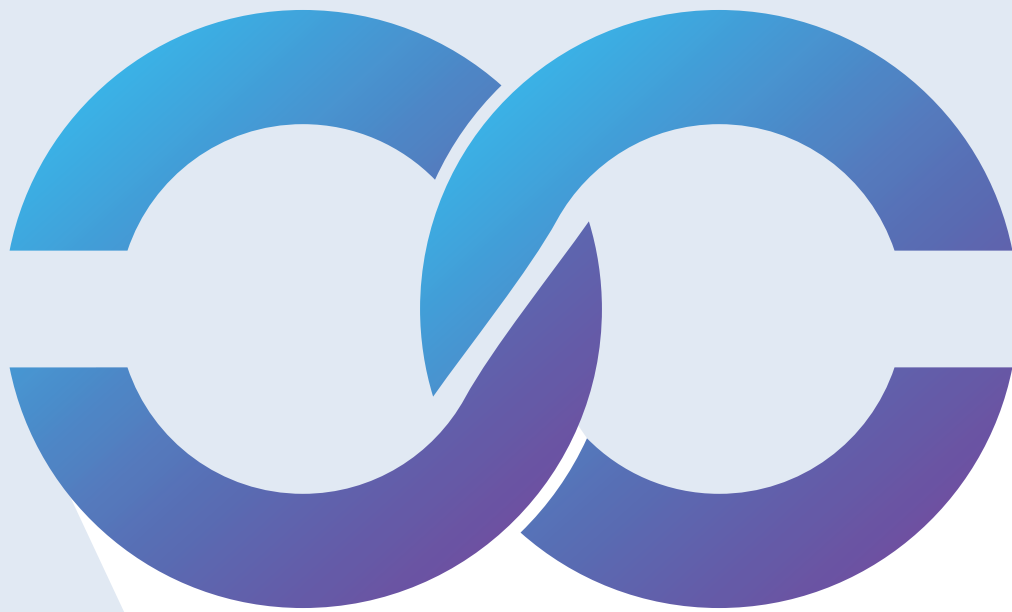


Down

1. Emergency measure in an epidemic where individuals are encouraged to stay at home (8)
2. _____ case, the first individual infected with a disease during an epidemic (5)
3. An individual suspected of potentially having COVID-19 (3)
4. Medically accepted position to improve breathing comfort and oxygenation (7)
5. ____ oral drug used to treat malaria, rheumatoid arthritis and lupus still in question in treating patients with COVID-19 (3)
6. COVID-19 was first identified in _____, China (5)
7. The Governmental organisation in India which released updated guidelines during the COVID-19 pandemic (5)

Across

3. Specialised clothing and equipment used as a safeguard against health hazards (3)
8. Investigational antiviral drug administered intravenously, inhibits viral replication. First developed to treat the Ebola (10)
9. Corona virus belongs to the family of _____ viruses (3)
10. Corona means _____ (5)
11. The 1918 influenza pandemic was also known as the _____(7,3)



CLINICAL CONVERSATIONS

Interesting Published Cases

- Guillain-Barre' Syndrome in Patients with SARS-CoV-2:
A Multicentric Study from Maharashtra, India -
Dr Rajesh Benny and Dr Rakesh Singh
- Clinical Characteristics and Outcomes of COVID-19
Patients Hospitalised in Intensive Care Unit -
Dr Rahul Pandit

Guillain-Barre' Syndrome in Patients with SARS-CoV-2: A Multicentric Study from Maharashtra, India



Dr Rajesh Benny
Fortis Hospital, Mulund, Mumbai



Dr Rakesh Singh
Fortis Hospital, Mulund, Mumbai

Megha C. Dhamne, **Rajesh Benny**¹, **Rakesh Singh**¹, Amitkumar Pande², Pankaj Agarwal³, Satish Wagh⁴, Pradyumna Oak⁵, Akshay Lakhota⁶, Yogesh Godge⁷, Vyankatesh Bolegave⁸, Darshan Doshi⁹, Yogesh Patidar¹⁰, Anil Venkatachalam¹¹, Bhavin Pujara¹², Sandeep Borse¹³, Prashant Makhija¹⁴, Satish Khadilkar¹⁵

Dr. L H Hiranandani Hospital, Powai, Mumbai, Maharashtra, ¹Fortis Hospital, Mulund, Mumbai, Maharashtra, ²Vedant Multispeciality Hospital, Chinchwad, Pune, Maharashtra, ³Global Hospitals, Mumbai, Maharashtra, ⁴Reliance Hospital, Navi Mumbai, Maharashtra, ⁵Nanavati Super Speciality Hospital, Mumbai, Maharashtra, ⁶Navkiran Neurohospital, Akola, Maharashtra, ⁷Jupiter Hospital, Thane West, Maharashtra, ⁸Highland Superspeciality Hospital, Thane, Maharashtra, ⁹Holy Spirit Hospital, Andheri East, Maharashtra, ¹⁰Bhaktivedanta Hospital and Resarch Center, Thane, Maharashtra, ¹¹Somaiya Superspecialty Hospital, Mumbai, Maharashtra, ¹²Aditi Hospital, Mulund, Mumbai, Maharashtra, ¹³Jehangir Hospital, Pune, Maharashtra, ¹⁴Wockhardt Hospital, Mumbai, Maharashtra

<https://www.annalsofian.org/article.asp?issn=0972-2327;year=2021;volume=24;issue=3;spage=339;epage=346;aulast=Dhamne>

DOI: 10.4103/aian.AIAN_1303_20

Background:

Guillain-Barre' Syndrome (GBS) has been shown to be associated with severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) infection. The aim of our study was to study the clinical profile and outcomes of GBS in COVID-19 from the Western region of India, the State of Maharashtra.

Methods:

This was a retrospective, multicentric observational study from different hospitals in Maharashtra beginning March 2020 until November 2020.

Results:

We report 42 patients with COVID-19 GBS. Mean age was 59 years (range,

24--85 years). 31/42 (73.8%) were men. GBS was the presenting symptom in 14/42 (33%), while six of them remained asymptomatic for COVID-19 despite positive SARS-CoV-2 on nasopharyngeal swab reverse transcriptase polymerase chain reaction. The median interval between COVID-19 and GBS was 14 days (SD + 11), with minimum of one and maximum 40 days. The clinical presentation was like that of typical GBS. Electrophysiological studies showed a predominant demyelinating pattern in 25/42 (59.5%). Inflammatory markers were elevated in 35/42 (83.3%) and 38/42 (90.5%) had an abnormal high-resolution CT (HRCT) chest. 14/42 (33.3%) patients required a

ventilator, with nine deaths. Intravenous immunoglobulin was the mainstay of treatment for GBS. Majority had a good outcome and were walking independently or with minimal support at discharge. In subgroup analysis, the postinfectious group had a better outcome than the parainfectious group.

Conclusion:

GBS in COVID-19 occurs as both parainfectious and postinfectious GBS. Parainfectious GBS needs more rigorous monitoring and may benefit from COVID-19 specific treatment. Routine screening for SARS-CoV-2 should be implemented in patients with GBS in view of the ongoing pandemic.

Clinical Characteristics and Outcomes of COVID-19 Patients Hospitalised in Intensive Care Unit

Dr Rahul Pandit

Director of Critical Care Medicine
& ICU at Fortis Hospital, Mulund

Rahul A Pandit, Gagana BN, Charudatt Vaity, Bindu Mulakavalupil, Jitendra S Choudhary, Vivek Jain, Pramila M Chandan, Harsh Joshi

Indian Journal of Critical Care Medicine (2021): 10.5005/jp-journals-10071-23945

<https://www.ijccm.org/abstractArticleContentBrowse/IJCCM/64/25/9/25008/abstractArticle/Article>

DOI: 10.5005/jp-journals-10071-23945

Background:

Meta-analysis and clinical studies suggest COVID-19 patients in ICU have a high mortality rate of 30–45%, which has evolved as a function of criteria of admission and the management modalities.

Material and Methods:

We conducted a retrospective evaluation for characteristics and outcomes in the critical care set up over a period of six months.

Results:

514 patients (74.3% males and 25.6% females) were evaluated. 9.72% (n = 50) patients expired, 78% (n = 39) were males. Mean age (years) was 57 (± 14 , range 64, 95% CI 55 to 58). 65.7% (n = 338) were of age more than 50 years, of which 71.5% (n = 242) were males. Males were at 20% higher risk for death than women. (RR = 1.2, 95% CI 0.66 to 2.31, p = 0.61 NS). There was 18% less risk of mortality in female vs male with comorbidities (RR 0.82, 95% CI 0.67 to 1.12, p = 0.32 NS). Risk for mortality in diabetics significantly increased by 116% vs non-diabetics. (RR 2.16, p = 0.0055, 95% CI 1.28 to 3.67). Highly significant risk of mortality in age group >50 years (3.13 times higher) vs age ≤ 50 years. (RR 3.18, 95% CI 1.71 to 8.64, p = 0.0003). 50.2% had moderate ARDS at admission. High

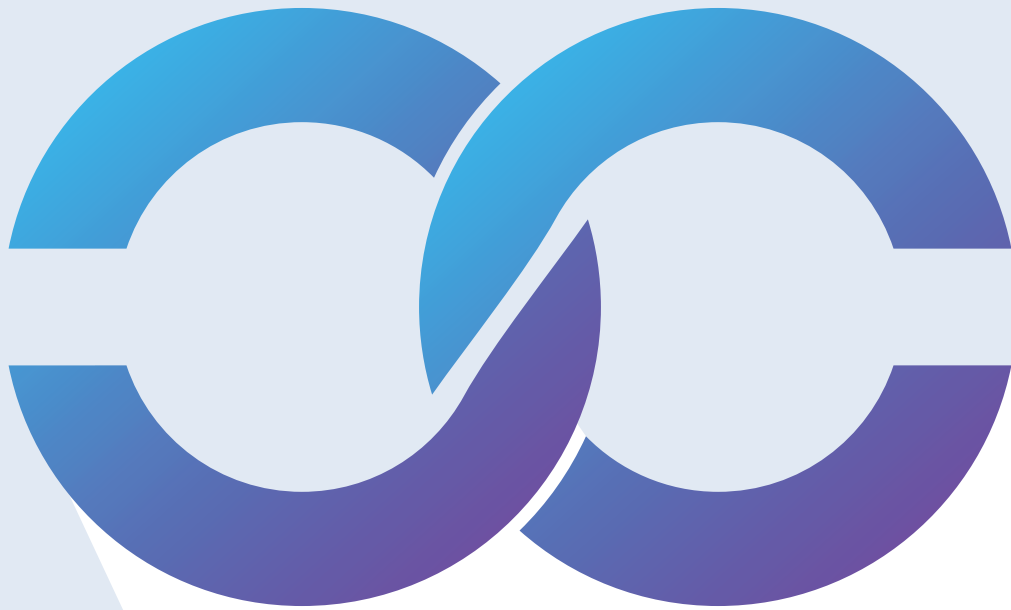
flow nasal canula was used in 47.2%. There is 5.79 times more likelihood to be on the ventilator with moderate to severe ARDS vs mild ARDS (RR = 5.79, 95% CI 3.10 to 11.05, p < 0.0001). Risk of death was six times higher for patients on ventilator those not on ventilator (RR = 6.08, 95% CI 3.49 to 10.59, p < 0.0001). The mean number of days on ventilator or patients who underwent tracheostomy (n = 49) was 14 days as compared to 6.6 days in patients who were extubated (n = 57) (p < 0.0001).

P/F ratio had negative correlation with number of days of hospitalisation (Pearson r -0.391, 95% CI -0.46 to -0.31, p < 0.0001). 67% less chances of mortality in patients on steroids (RR = 0.33, 95% CI 0.19 to 60, p = 0.0012). Mean duration of ICU stay (days) was 8 (± 5 , range 29, 95% CI 7.5 to 8.4).

Conclusion:

We observed that a strict adherence to the basic principles of ARDS management resulted in a lower mortality in ICU setting.





ONCO CONNECT

Oncology Updates

- Fortis Oncology Tumour Board: An Initiative of the Fortis Oncology Specialty Council - *Dr Sandeep Nayak*
- Case Discussions & Tumour Board Decisions
 - Case 1: High grade ductal carcinoma right parotid post op ypT1N2M0; Stage IVA with strong AR and HER 2 Neu positivity - *Presenter: Dr Vineeta Goel*
 - Case 2: Dual primary-Basal cell carcinoma with metastatic carcinoid from small intestine
Presenter: Dr Sreekanth Reddy

Fortis Oncology Tumour Board: An Initiative of the Fortis Oncology Specialty Council



Dr Sandeep Nayak
 Chairperson Oncology Speciality Council Director,
 Department of Surgical Oncology, Fortis Cancer Institute, Bangalore

Connecting Fortis Oncology was the goal with which the Pan Fortis Oncology Speciality Council was established. The idea was to bring uniformity and improve the quality of care. One of the major tasks the Council undertook was to start the Pan-Fortis Oncology Tumour Board. It was to be a forum to discuss the difficult cases faced by the Oncologists at Fortis and provide solutions. It was envisaged as a forum where multiple brains work on a problem to find an amicable solution.

Many a times we have to take the non-standard path of treatment for a patient where a standard is not available.

The Tumour Board helps in rationalising these choices by discussing and arriving at a consensus. We have had many such meetings over the past few months. Currently, our Pan-Fortis Oncology Tumour Board meets on the third Thursday of every month. These discussions have helped many oncologists decide the right line of treatment for the

patients under their care.

The Oncology Speciality Council is looking holistically at the way we deliver Oncology Care within the Fortis eco-system. We are looking at enriching the system by adapting better technology and helping build better digital infrastructure that would help in patient care, as well as research. The vision is to emerge as a world leader in Oncology Care.

There are many ways in which we can cooperate to provide better care.

Together we can improve care!



Case Discussions and Tumour Board Decisions



Case 1:
 High grade ductal carcinoma right parotid post op ypT1N2M0; Stage IVA with strong AR and HER 2 Neu positivity

Presenter: Dr Vineeta Goel
 Fortis Hospital, Shalimar Bagh

Case History

A 62-year-old male was investigated for a swelling in front of his right ear. The MRI of the neck showed a small intra parotid lesion in the superficial lobe of the parotid. The FNAC from the parotid showed poorly differentiated carcinoma. His CT Chest was normal. Following which, he underwent surgery, a right total parotidectomy with right selective neck dissection.

The histopathology, after surgery, showed a 2x2 cm tumour in the superficial lobe of parotid consistent with a high grade salivary duct carcinoma. Although, the tumour had focal perineural invasion the deep lobe and surgical margins were free. Two out of 41 lymph nodes were positive for metastases without extra capsular extension. On IHC it showed immunopositivity for androgen receptor (AR), CK 5,6,7 and HER 2 Neu. The lesion was immunonegative for p63, DOG-1, GATA3 and S100. Ki 67 was 40-44%.

Challenges in this case highlighted in the Tumour Board

This tumour in the parotid is an uncommon salivary gland cancer. It is not a salivary parenchymal carcinoma, rather it is a ductal

carcinoma with strong AR and HER 2 Neu positivity. These tumours are uncommon, hence, not many guidelines are available regarding its post-operative adjuvant treatment. Through literature, we know that these cancers are highly aggressive and carry a high potential for distant metastases.

SPECIFIC DISCUSSION POINTS IN THE TUMOUR BOARD

1. What should be the post-operative adjuvant treatment plan for this patient? Is there any role of concurrent chemotherapy along with radiation therapy?

Discussion and consensus: Everyone unanimously agreed that the patient should be treated with standard post-operative adjuvant radiation therapy. Everyone also agreed that there is no recommendation for use of concurrent chemotherapy along with radiation therapy.

2. What is the role, benefit and evidence for use of adjuvant anti HER 2 Neu therapy in this case and if yes, then for how many cycles?

Discussion and consensus: Everyone shared that there is no high level of evidence for use of adjuvant anti HER 2 Neu therapy in this case. However,

this is an aggressive cancer with high potential for distant metastases. The patient may be treated with anti HER 2 Neu therapy after a clear discussion with the patient and his family, regarding lack of scientific evidence for the benefit of anti HER 2 Neu therapy and the high risk of distant disease relapse. If the family understands the given situation and is keen to undergo treatment, the patient may be treated with anti HER 2 Neu therapy, starting 1-2 weeks after completion of the post-operative RT. If anti HER 2 Neu therapy is opted for, it should be given as a total of 17 cycles at three weekly intervals with regular ECHO based cardiac monitoring.





**Case 2:
Dual primary-Basal cell carcinoma with
metastatic carcinoid from small intestine**

Presenter: Dr Sreekanth Reddy
Fortis Hospital, BG Road

Case History

A 60-year-old male presented with history of an ulcer in the left retroauricular area for a duration of five years, which was slowly progressing. Clinical examination showed a 5 cm ulcer in the retroauricular area with enlarged neck nodes in level II on the left side. On evaluation with a biopsy it was revealed to be a basal cell carcinoma with squamous differentiation.

On PET scan evaluation along with BCC lesion and neck nodes, patient was incidentally detected with a FDG avid lesion in the duodenum with multiple retropancreatic nodes and multiple liver lesions, suggestive of metastasis.

The biopsy of the liver lesion showed typical carcinoid tumour of Grade 1.

Basal cell carcinoma is treated with wide local excision with partial parotidectomy with modified radical neck dissection and a bilobed flap reconstruction.

SPECIFIC DISCUSSION POINTS IN THE TUMOUR BOARD

1. How do we manage this asymptomatic carcinoid which is in advanced metastatic stage?

Discussion: Prognosis of advanced

carcinoid tumours depends on the site of origin and may also impact clinical behaviour. As an example, among patients with metastatic well-differentiated NETs, survival, it is worst for patients with lung and colon primaries (median survival for distant G1 or G2 disease 24 and 14 months, respectively) and is most favourable for tumours arising in the small intestine (median survival 103 months). This heterogeneity in clinical behaviour complicates the comparative assessment of benefit from individual therapies.

In asymptomatic carcinoids arising from the GI System there are three options:

- 1) Observation
- 2) Octreotide therapy and
- 3) Lu-Dotatate therapy.

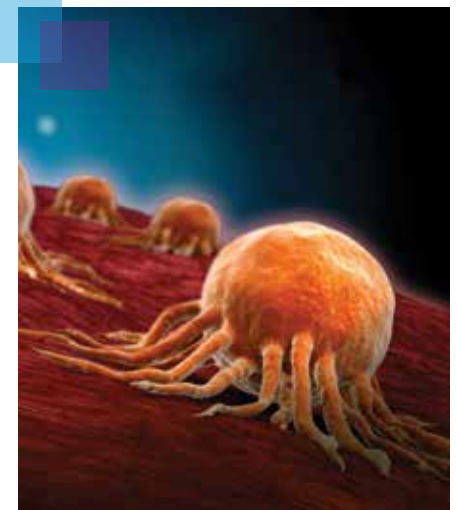
In the PROMID trial, 85 patients with locally inoperable or metastatic small bowel GINETs were randomly assigned to receive treatment with either long-acting octreotide (Sandostatin LAR 30 mg monthly) or placebo. The median time to tumour progression was significantly longer with octreotide compared with placebo (14.3 versus 6 months), confirming an antitumor effect in this population.

CLARINET trial, a randomised, placebo-controlled, phase III trial evaluated the antiproliferative effects of lanreotide in 204 patients with advanced well- or moderately differentiated, non-functioning, gastroenteropancreatic NETs, including both GINETs and pancreatic NETs.

Compared with placebo, there was a highly significant advantage in PFS with the use of lanreotide. The estimated rates of PFS at 24 months were 65 versus 33 percent, and there were no differences in the quality of life or overall survival.

Discussion and Consensus Conclusion

Can be considered for a DOTONAC PET CT and to proceed with Octreotide therapy.





CLINICALKEY

ClinicalKey from ELSEVIER

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MSOG has made ClinicalKey available for all Fortis doctors, DNB students and nurses. Read on to know how to access ClinicalKey:

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How to access and use ClinicalKey

- If you are on the Fortis intranet, you can just go to the website (www.clinicalkey.com) and access all content that is part of the subscription.
- It is recommended to create your profile so that you can access ClinicalKey even when you are outside the Fortis network.

How to create a User Profile/Personal Account

1. Navigate to the ClinicalKey application at www.clinicalkey.com.

2. Access the Registration functionality through one of the following ways:

- Click the **Register** link, located in the upper right corner of the screen.
- Click the **Register now** link on the **LOGIN** screen.

3. The REGISTER screen displays.

4. Enter the following information in the fields provided as necessary:

Note: The asterisk (*) indicates a required field.

- First Name, Family Name, Email Address, Password

Note: Your email address and password will be your login credentials.

- **Additional Profile Details** fields

5. Enable the **checkbox** acknowledging that you have read the Registered User Agreement.

6. Click [**Register**] when done.

7. The following actions occur:

- A success confirmation message displays at the top of the screen.
- An e-mail is sent, confirming your registration.

How to activate ClinicalKey for remote access

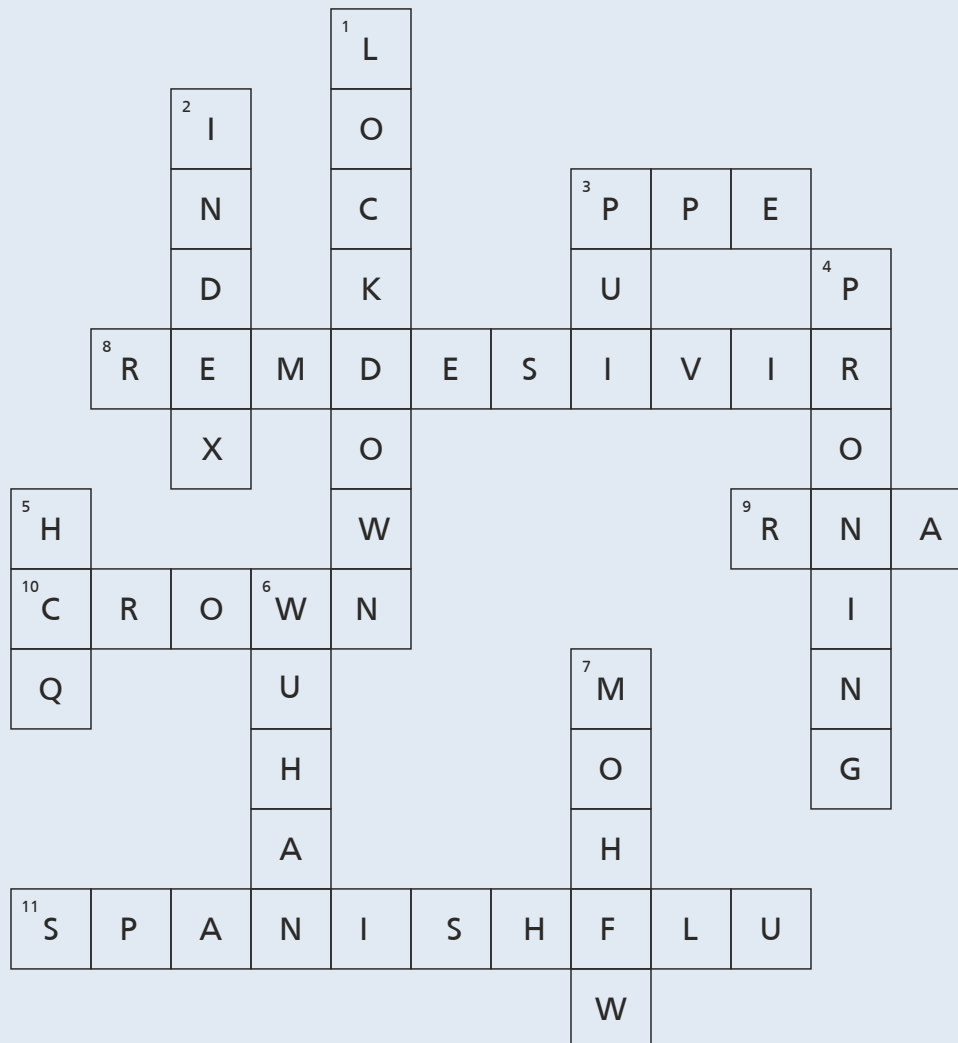
To activate remote access from Fortis intranet follow below steps:

- Click **Login** at the top of ClinicalKey.



- From the Login page, click the **Apply Now** link.
- Once navigated to the Remote Access Screen, **enter** your institutional e-mail address.
- Once you enter your email address, a **message will display** to look for an e-mail from ClinicalKey that includes the remote access confirmation.
- When you receive the confirmation e-mail, **activate** your remote access by clicking on the link available in the e-mail.
- Once you have opened the link, you will be prompted to **login with your credentials** to gain long term remote access.
- If you have to access from outside the Fortis network you have to login from intranet at least **once in three months**.

Answers To The Crossword



Down

- Emergency measure in an epidemic where individuals are encouraged to stay at home (8)
- _____ case, the first individual infected with a disease during an epidemic (5)
- An individual suspected of potentially having COVID-19 (3)
- Medically accepted position to improve breathing comfort and oxygenation (7)
- ___ oral drug used to treat malaria, rheumatoid arthritis and lupus still in question in treating patients with COVID-19 (3)
- COVID-19 was first identified in _____, China (5)
- The Governmental organisation in India which released updated guidelines during the COVID-19 pandemic (5)

Across

- Specialised clothing and equipment used as a safeguard against health hazards (3)
- Investigational antiviral drug administered intravenously, inhibits viral replication. First developed to treat the Ebola (10)
- Corona virus belongs to the family of _____ viruses (3)
- Corona means _____ (5)
- The 1918 influenza pandemic was also known as the _____ (7,3)

A BIG THANK YOU TO ALL OUR COVID WARRIORS!



Please send your comments, feedback and suggestions to
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