

therapy, should be treated. However, whether this strategy generates a reduction in SUDEP occurrence necessitates more prospectively collected data, particularly among children and adolescents.

DIVYANI GARG¹ AND SUVASINI SHARMA^{2*}

Departments of ¹Neurology and ²Pediatrics,
Lady Hardinge Medical College, New Delhi, India.

*sharma.suvasini@gmail.com

REFERENCES

1. Garg D, Sharma S. Sudden Unexpected Death in Epilepsy (SUDEP) – What pediatricians need to know [published online ahead of print, 2020 Jun 12]. *Indian Pediatr.* 2020;S097475591600192.
2. Finsterer J, Bersano A. Seizure-triggered Takotsubo syndrome rarely causes SUDEP. *Seizure.* 2015;31:84-7.
3. Templin C, Ghadri JR, Diekmann J, Napp LC, Bataiosu DR, Jaguszewski M, *et al.* Clinical features and outcomes of Takotsubo (Stress) cardiomyopathy. *NEJM.* 2015;373:929-38.
4. Nascimento FA, Tseng ZH, Palmiere C, Maleszewski JJ, Shiomi T, McCrillis A, *et al.* Pulmonary and cardiac pathology in sudden unexpected death in epilepsy (SUDEP). *Epilepsy Behav.* 2017;73:119-25.
5. Mitchell A, Marquis F. Can Takotsubo cardiomyopathy be diagnosed by autopsy? Report of a presumed case presenting as cardiac rupture. *BMC Clin Pathol.* 2017;17:4.
6. Ryvlin P, Nashef L, Lhatoo SD, Bateman LM, Bird J, Bleasel A, *et al.* Incidence and mechanisms of cardiorespiratory arrests in epilepsy monitoring units (MORTEMUS): A retrospective study. *Lancet Neurol.* 2013;12:966-77.

Telephonic Triage and Telemedicine During the Peak of COVID-19 Pandemic – Restricting Exposure to Healthcare Professionals

We read with interest the article by Mahajan, *et al.* [1] on the use of telemedicine during the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic. The authors have well summarized the pros and cons of tele-health service. We would like to share our experience with telemedicine used with forward triaging that helps mitigate some of its major limitations and protects healthcare workers (HCWs) from potential exposure.

The guidelines for telemedicine have been eased to enable continued care of non-COVID illnesses [2]. However, it is the chronic illnesses that require holistic care by an entire team, which have taken a backseat in the current scenario. Telehealth needs to be part of routine practice, and not just during emergencies [3]. This focuses on creating a more sustainable model of care, and a telehealth-ready workforce, incorporating telemedicine training even in the medical curriculum [3]. While many countries are using telemedicine to triage COVID suspects, we planned to develop it into a system of care even in the post-pandemic phase [4,5].

Following our initial experience with use of telephonic consults, a new platform that incorporated telemedicine into the existing Hospital Information system (HIS) was launched on 8 June, 2020. A teleconsultation was provided as per schedule, once a telemedicine appointment was taken by the patient, using a simple feature phone, any video calls or images

are shared through WhatsApp (Business). Referral to other specialties was also possible to ensure comprehensive care. The prescription was sent to the patient as a PDF document. After a telemedicine consultation, in case the physician felt the need of an in-person visit, the same is again indicated in the online system and patient is allowed physical entry into the OPD after screening on the appointed date and time.

In our hospital, telephonic-only consults were provided to 2477 patients over a period of 45 days (21 April to 7 June, 2020) while the new system has enabled provision of care to 10,625 patients over the same time span (8 June to 16 July, 2020) (**Fig. 1**). Physical consultations constituted only 29% of the consultations in this period. This also reflects the proportionate reduction in exposure of healthcare staff to potential SARS-CoV-2 carriers.

The system mitigated the limitation of telemedicine by

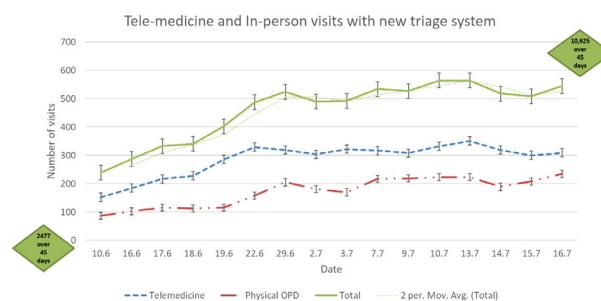


Fig. 1 Line diagram showing the number of patients seen through new OPD system. The red line indicates the number of patients provided in-person visit after telemedicine triage. The green diamonds shows the number of patients cared for- 2477 patients were provided tele-consult before the launch of new platform over 45 days which increased to more than 10000 patients in next 45 days.

allowing physical examination after adequate triaging in selected patients. Although, rural India is poor in individual digital literacy, there is a wide network of e-mitra kiosks, ASHA workers and teachers who have come forward to help navigate the system and move through the process. The benefit arising out of limited physical visits to the hospital for patient are already described but restricting the exposure of doctors and patients to someone who is potentially infected is of vital importance.

For a major impact to be seen, an operational telehealth network is required, and infrastructure needs to be scaled up. It also requires a behavior change of not just an individual or an institute but an entire health system as well as patients. We have tried to curtail these limitations and made a beginning while making use of the COVID-19 crises as an opportunity to introduce the system that will stay for future.

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ALIZA MITTAL^{1*} AND PUNEET PAREEK²
Departments of ¹Pediatrics and ²Radiation Oncology,

All India Institute of Medical Sciences,
Jodhpur, Rajasthan, India
*alizamittal@gmail.com

REFERENCES

1. Mahajan V, Singh T, Azad C. Using telemedicine during the COVID-19 pandemic. *Indian Pediatr.* 2020;57:652-7.
2. Ministry of Health and Family welfare, Government of India. Telemedicine Practice Guidelines Enabling Registered Medical Practitioners to Provide Healthcare Using Tele-medicine. New Delhi. Available at <https://www.mohfw.gov.in/pdf/Telemedicine.pdf>. Accessed on April 03, 2020
3. Smith AC, Thomas E, Snoswell CL, *et al.* Telehealth for global emergencies: Implications for coronavirus disease 2019 (COVID-19) [published online ahead of print, 2020 Mar 20]. *J Telemed Telecare.* 2020;1357633X20916567.
4. Tolone S, Gambardella C, Bruscianno L, G del Genio, Lucido FS, Docimo L. Telephonic triage before surgical ward admission and telemedicine during COVID-19 outbreak in Italy. Effective and easy procedures to reduce in-hospital positivity. *Int J Surg.* 2020; 78:123-25
5. Hollander JE, Carr BG. Virtually perfect? Telemedicine

Proximal Limb Girdle Weakness, Joint Hyperlaxity, and preserved Deep Tendon Reflexes: A Distinctive Phenotype

A 9-year-old girl presented with mild motor delay and progressive proximal limb-girdle weakness. Socio-cognitive milestones were normally attained. Examination revealed normal head size and intellectual functioning, proximal limb girdle weakness, mildly prominent calves, and preserved deep tendon jerks (including both ankles). She had hyperlaxity of finger joints and both elbow joints (Beighton score 4/9). She also had polyminimyoelonus. Creatine kinase levels were elevated (790 IU/L) while electrocardiogram revealed tremor (**Fig. 1**). Nerve conduction studies revealed motor axonal loss with sensory sparing while electromyography (EMG) was suggestive of abnormal spontaneous activity (fibrillations and fasciculations) signifying active denervation. She was not cooperative for voluntary EMG assessment. Multiplex ligation-dependent probe amplification (MLPA) revealed homozygous deletion of exon 7 and 8 of *SMN1* gene confirming the diagnosis of spinal muscular atrophy type 3 (SMA type 3).

Important differential diagnosis for progressive limb girdle weakness presenting in late childhood (with onset beyond infancy) include muscular dystrophies (especially Duchenne

muscular dystrophy and limb girdle muscular dystrophies) and SMA type 3. It may be difficult to differentiate these conditions based on deep tendon jerks and creatine kinase levels because these are often misleading. Deep tendon reflexes may be preserved in SMA type 3 [1]. Joint hypermobility and hyperlaxity, although an overlooked feature of SMA, if present favors a diagnosis of SMA over muscular dystrophy [2,3]. The caveats include early-onset muscle disorders such as congenital muscular dystrophies and congenital myopathies [2]. In SMA,



Fig. 1 Electrocardiogram of the index patient showing the high frequency (30-40 Hz) tremor (arrows) due to muscle fasciculations (seen predominantly in limb leads).