Therapeutic Clowning in Pediatric Practice: A Novel Concept to Think About in India

Therapeutic or medical clowning is a new concept across various healthcare settings around the world [1]. It is a paramedical practice in which clowns are associated with healthcare system to mitigate anxiety, stress, fear and sadness in admitted patients, thereby augmenting the healing process [2]. They create a more positive and constructive hospital environment and trust between patients and medical teams. Research has concluded that medical clowns have a significantly positive effect in adults [3]. A consistent observation has been seen that clowns are always appreciated by pediatric patients [4].

Idea of medical clowning was conceptualized by Michael Christensen in 1986, in the United States. At a physiological level, laughing stimulates release of endorphins modulating immune system. Laughing also replaces negative feeling with positive ones at and emotional level. Clowning distracts the child from the current situation at the cognitive level. Socially, laughing stimulates better interaction between children and health care personnel [4,5].

This practice is still nascent at present in India. Sir JJ Hospital Mumbai has begun with medical clowning in pediatric wards recently. As a pediatrician, our primary responsibility is better health and quality of life of our pediatric patients, and hence, this novel idea of therapeutic clowning is worth trying, especially to begin with vaccination sessions. Further research is warranted to replicate its results in the Indian settings.

Published Online: September 05, 2020: PII: S097475591600239.

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Multisystem Inflammatory Syndrome in Children (MIS-C) -Recent Updates

We read the very timely article by Bhat, *et al.* [1] providing valuable insights into clinical epidemiology of multisystem inflammatory syndrome in children (MIS-C). We comment on the recent evidence to complement the information provided.

Recent clinical guidelines by American College of Rheumatology (ACR) elaborate on the most appropriate diagnostic and therapeutic steps for MIS-C at the present time, advising inflammatory markers and cytokine panel testing [2]. There is noteworthy discordance in interleukin levels of IL-1, IL-6 and IL-10 among patients with Kawasaki disease (KD) vs MIS-C [3]. While IL-1 is the main mediator of coronary artery inflammation in KD, inflammatory process in MIS-C is predominantly driven by IL-6 and IL-10, which may play a role in the myocardial dysfunction and higher severity of the 2019nCoV infection [4].

We concur with the authors that the role for specific cytokine blockade including use of biologics in MIS-C is still lacking. The ACR guidelines advice immunomodulatory therapy for all severe/critical MIS-C patients with shock, significant respiratory distress, neurologic changes, dehydration, or features of KD. IVIG and glucocorticoid remain first line agents either alone or in combination. Anakinra is safe in severe infections among children with hyper-inflammatory syndromes. Although tocilizumab is effective in reducing mortality and ICU admission in patients with severe COVID-19 pneumonia [2], the clinical evidence is insufficient regarding its efficacy and safety for COVID-19 because of concerns regarding risk of secondary bacterial and fungal infections [5]. Aspirin (3-5 mg/kg/day) should be used in patients with MIS-C and KD-like features and/or thrombocytosis and continued until normali-zation of platelet count and confirmed normal coronary arteries at ≥ 4 weeks after diagnosis. Anticoagulation with enoxaparin should be added in patients with coronary artery aneurysm and Z score ≥ 10.0 or an ejection fraction (EF) <35%[2], but despite benefits, strategy based evidence is required due to high risk of hemorrhagic events or complications.

With the availability of these guidelines a standardized treatment plan for MIS-C involving multidisciplinary care

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under pediatric cardiology, infectious disease, intensive care and rheumatology specialists can be designed. As the evidence base for COVID-19 and MIS-C treatment and care management is evolving rapidly, this guidance may change in future.

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Impact of the COVID-19 Pandemic on Retinopathy of Prematurity Practice: An Indian Perspective

The severe acute respiratory syndrome coronavirus 2019 (SARS-Cov-19) associated lockdown in India led to cessation of public transport and routine outpatient department (OPD) services. However, the need to screen to premature babies for retinopathy of prematurity (ROP) continued, with reduction in those actually getting screened. ROP requires urgent treatment and has been listed as an essential medical service during the COVID-19 pandemic by both the American Academy of Ophthalmology and All India Ophthalmological Society [1-3]. We discuss the impact of the COVID-19 pandemic on ROP services experienced at our center.

Impact on ROP screening: Following the guidelines issued by the All India Ophthalmological Society (AIOS) in conjunction with the Vitreo Retina Society of India (VRSI) and the Indian Retinopathy of Prematurity (iROP) Society, we continued to screen premature babies for ROP [2,3]. Being a tertiary care institute, we are the primary referral center for neighboring states. However, given the scarcity of trained ophthalmologists to perform ROP screening, we often end up as the first point of screening for majority of the regional neonatal intensive care units (NICU). There was a decrease in the number of infants screened both in the OPD (396 vs 87; P=0.001) as well as in the institute NICU (241 vs 169; P=0.001) during similar time periods pre (1st January, 2020 to 23 March, 2020) and post (24 March, 2020 to 31 May, 2020) COVID-19 lockdown. This could primarily be attributed to the lack transport facilities for patients to reach the hospital, despite this being permitted

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during the lockdown. In the pre lockdown period, the number of babies screened in the OPD were significantly higher than those screened inside the institute NICU/neonatal nursery (P=0.001), which was also reversed during the lockdown period.

Impact on ROP treatment: Laser photocoagulation was increasingly preferred (49 eyes) over intravitreal anti-vascular endothelial growth factor (anti-VEGF) agents (2 eyes) as the primary treatment during the lockdown period. The main reason for this was the finite nature of laser photocoagulation compared to the risk of recurrences with anti-VEGF agents, which requires regular and extended follow-up [4]. We had at least three babies with aggressive posterior retinopathy of prematurity (APROP) who were given anti-VEGF injection prior to lockdown and missed follow-up for two months owing to movement restrictions during lockdown. While the disease regressed in two of these babies, one progressed to develop tractional retinal detachment in both eyes and required surgical intervention. In the pre-lockdown period, all laser treatments (for outborns as well as inborns) were done inside the neonatal nursery/NICU of our institute under monitoring by a neonatologist. This sometimes entailed a wait period of 24-48 hours depending on availability of a monitoring bed in the NICU. During the lockdown, there was shut down of most elective procedures such as cataract surgery. This allowed availability of more operation theatre (OT) tables for emer-gency procedures. We therefore arranged to perform all ROP interventions in the OT itself with the focus being on same day treatment. A pediatrician was available on call for monitoring in addition to the anesthetist. This helped reduce the contact of outborns with inborns as well as other NICU healthcare professionals in addition to reducing the waiting time. All lasers were performed under topical anesthesia using personal protective equipment as per the AIOS guidelines [2,5].

Impact on surgical rate: The proportion of babies requiring lens sparing vitrectomy (LSV) as the primary intervention increased from 1.1% in the pre-lockdown period to 2.9% in the post-

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