

Surgical Audit of Cases Operated in 6 Months of Pandemic in Tertiary care Paediatric Hospital

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Objective: To analyse and quantify COVID pandemic actual impact on the surgical paediatric orthopaedic cases and to analyse effect of complete lockdown and gradual unlock in a tertiary care paediatric hospital in Mumbai.

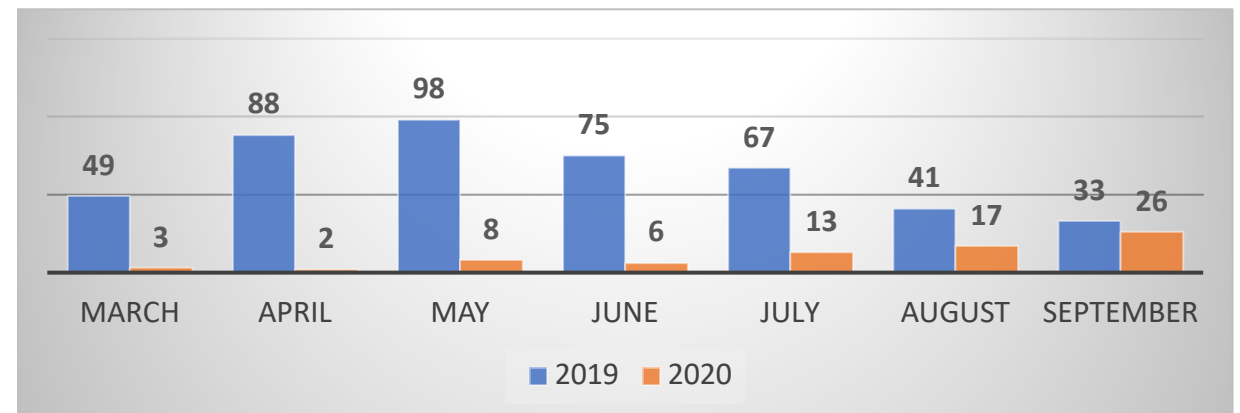
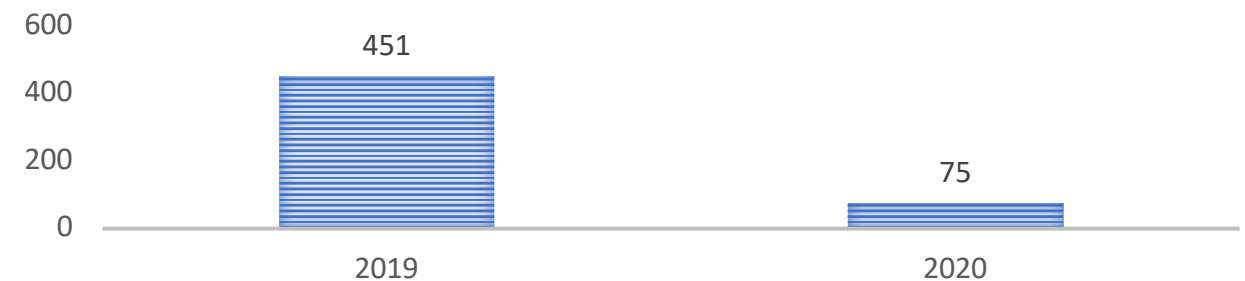
Materials And Methods: Data collected from 18 March 2020 to 30 September 2020 and 15 March 2019 to 30 September 2019 and compared to similar control period with matches in duration and social patterns.

They were analysed on basis of

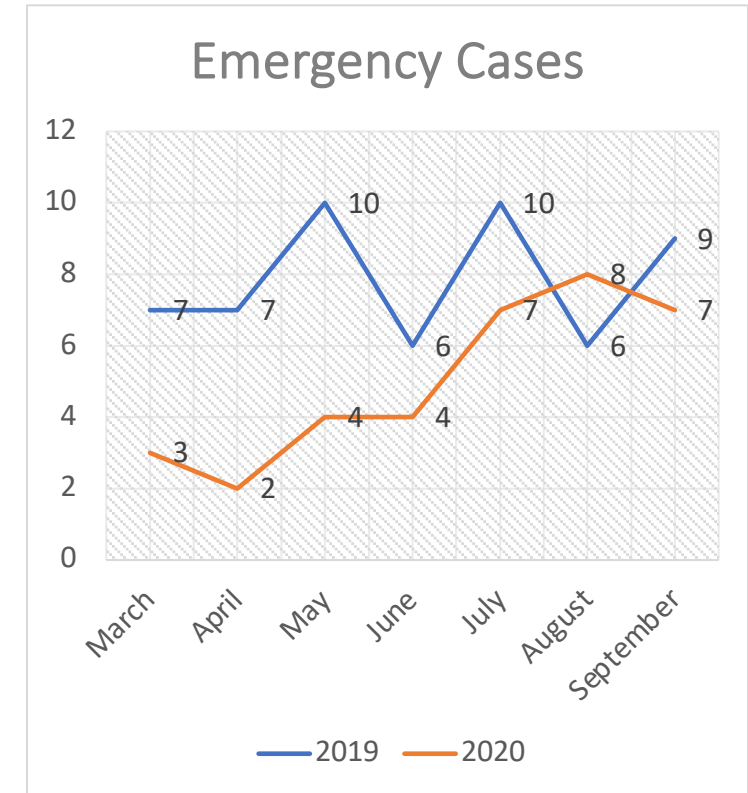
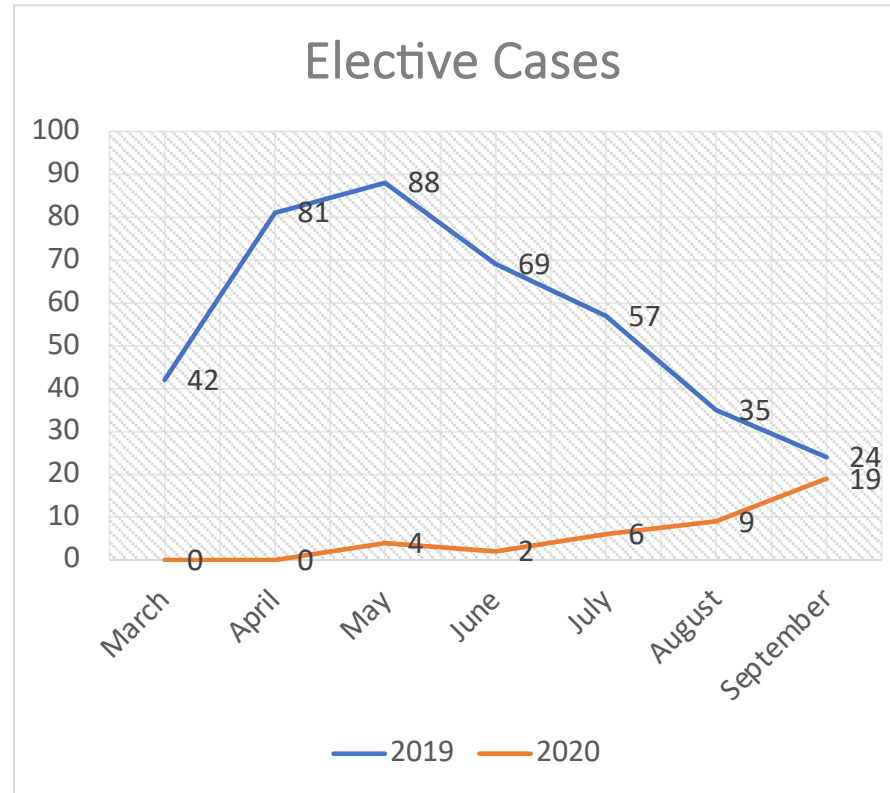
1. COVID status of patient
2. Admission to operative day time
3. Type of presentation to hospital
4. Nature of surgery – elective or emergency.

Results: A total of 75 patients were admitted and operated during 2020 (average 11.53 cases per month) as against 451 cases operated in 2019 (average 69.38 cases per month) [$p < 0.05$]. It shows drastic reduction in cases by 83.37%

Of which maximum 34.6% operated in September 2020 as against 21.7% operated in month of May 2019.

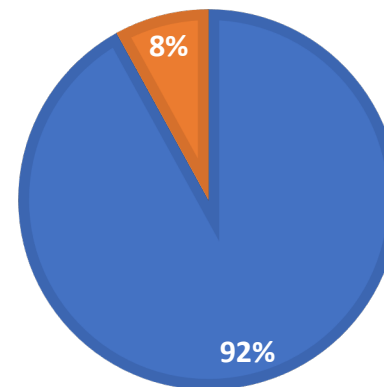


Every subsequent month the elective cases have increased in 2020 despite of the fact that September showed peak of pandemic in India. However in emergency cases no such trend was observed .

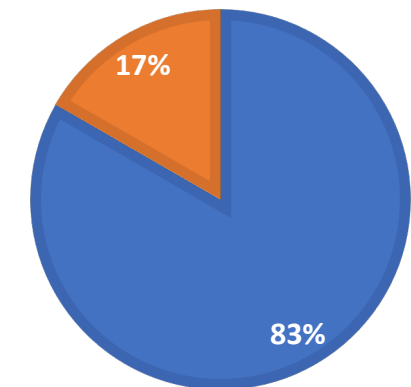


Of total 75 patient 6 patient (8%) were COVID positive shows that only small percentage of children were COVID positive. 5 of which (83%) were operated after they turned negative while one patient (17%) was operated in spite of being positive.

COVID STATUS

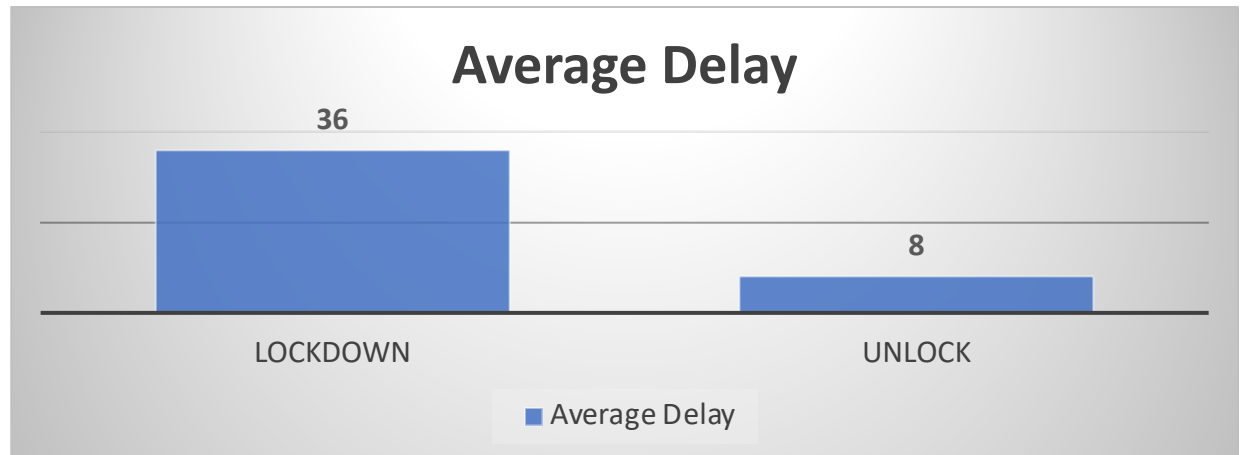
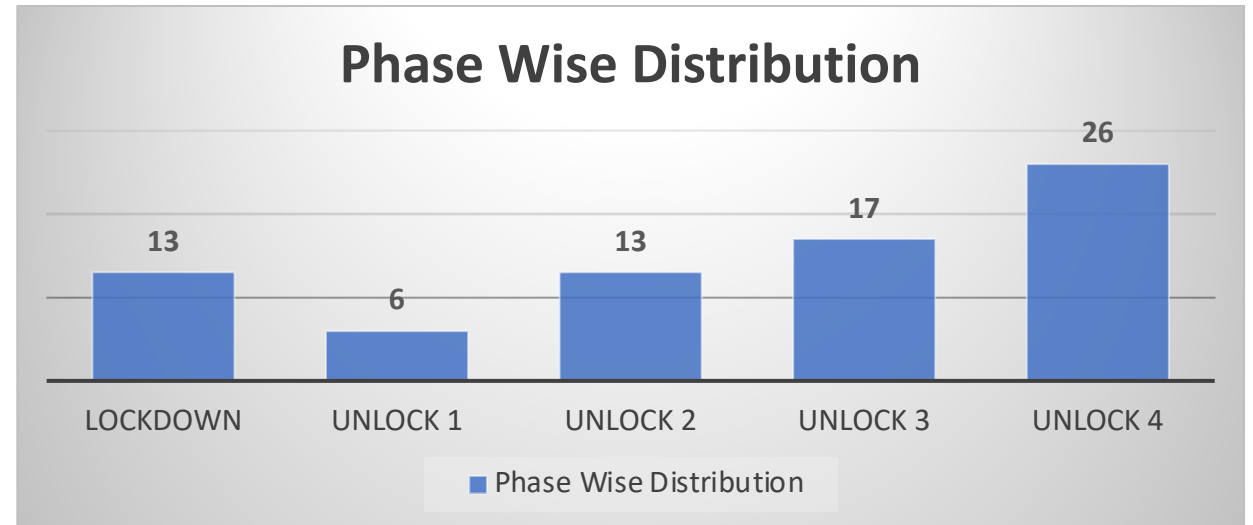


COVID POSITIVE CASES

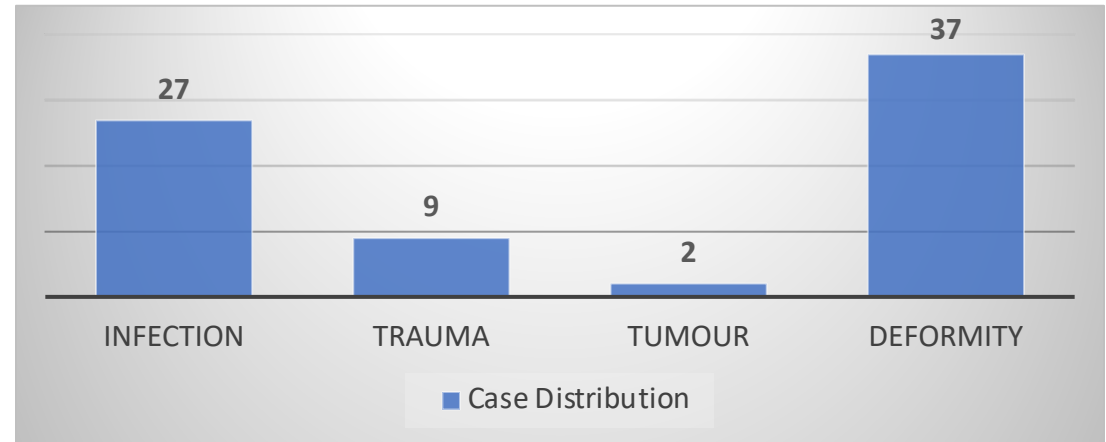


Cases have increased as we moved from lockdown to unlock phase. Even in unlock phase gradual increase in the cases has been seen.

There was an average delay of 36 hrs in admission to surgery in lockdown phase which has decreased to 8 hrs in unlock phase.(P<0.05)



Most cases reported during 2020 are the patient who either has relapse of deformity or left treatment in middle (49%) apart from infections (36%) and trauma (12%).



Conclusion: Number of surgeries has significantly reduced in COVID times (83.37% in our scenario). As we entered in period of unlock number of surgeries increased despite of fact that peak in India was in September . With better infrastructure and COVID protocol , the duration of delay from admission to surgery has decreased over time. Most cases reported in 2020 are either relapse of deformity or left treatment in middle.

References:

- Management of Orthopaedic Patients During COVID-19 Pandemic in India: A Guide “Indian J Orthop. 54(3): 402-407”
- Collateral effect of COVID-19 on orthopedic and trauma surgery Randau TM, Jaenisch M, Haffer H, Schö mig F, Kasapovic A, Olejniczak K, et al. (2020) PLoS ONE 15(9): e0238759.
- Surgery during COVID-19 pandemic Shanthanna H, Uppal V, et al. The Lancet Vol 369, Issue 10261
- Recommendations for surgery during the novel coronavirus (COVID-19) epidemic Zheng Liu, Yawai Zhang, Xishan Wang, et al. Indian J Surg. 2020 Apr 11: 1-5
- Commentary on current guidelines for Paediatric Orthopaedic Surgery during Covid-19 Pandemic <http://posi.in/covid-19-pandemic.html>