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Practice of paediatric surgery after the COVID-19 Epidemic Cross-Sectional Investigation

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Abstract

Background: Since the COVID- 19 epidemic was declared by the World Health Organization on March 11, 2020, routine clinical practices were affected, including pediatric surgery services. We aimed to compare pediatric surgery practices, including the number and types of surgery, both voluntary or emergency surgeries and outpatient services, before the outbreak and during the COVID- 19 epidemic in our institution.

Material and Methods: We retrospectively compared pediatric surgery practices, including voluntary and emergency surgeries, and outpatient services between the former one- time period(March 2019 – February 2020), the last three months of that period(December 2019 – February 2020) before the outbreak, and the three months(March – May 2020) during the COVID- 19 epidemic in our sanitorium.

Results: The frequency of voluntary surgeries during the epidemic was lower than during the last three months before the outbreak 61vs. 18(3-fold), 19vs. 13(15-fold), 19vs. 5(4-fold), and 30vs. 15(2-fold) for digestive, bambino, urology and oncology cases, singly. No laparoscopic procedures were performed during the epidemic compared with the one- time period before the outbreak (0vs. 16 cases). The frequency of all emergency pediatric procedures ahead and during the COVID- 19 epidemic was similar (29vs. 20 cases, singly). Also, a declining trend was also fluently apparent in the outpatient services during the epidemic compared with before the outbreak, both in the new and the established cases.

Conclusions: The pediatric surgery practices in our institution have been severely affected by the COVID-19 epidemic, including voluntary and inpatient services. This reversal needs a comprehensive strategy to avoid morbidity from the neglected voluntary surgeries during the epidemic, including the proper comparison between the real trouble of COVID- 19cross- infection and the benefits of voluntary procedures [1].

Keywords: COVID-19 epidemic; Voluntary and emergency surgeries; Indonesia outbreak outpatient services; Pediatric surgery practices

Introduction

The World Health Organization (WHO) declared COVID- 19 as a worldwide epidemic on March 11, 2020. The first two cases of COVID- 19 were linked in Indonesia on March 2, 2020 while the first case in the Special Region of Yogyakarta Province was announced on March 15, 2020. The total population of Yogyakarta Province in the morning of June 2020 is, while the pediatric population is, 159. Eventually, the Special Region of Yogyakarta was indicated to have original transmission of COVID- 19 on April 22, 2020. Until September 6, 2020, the total number of vindicated cases with COVID-19 in Yogyakarta was 1557 cases and 46 deaths(3). Also, rather of the lockdown, our provincial government applied the emergency response for the COVID- 19 policy.

Our sanitorium is a tertiary referral sanitorium that primarily serves communal and pastoral populations from the Special Region of Yogyakarta Province, Indonesia. Accordingly, our sanitorium was assigned by the Ministry of Health of the Republic of Indonesia as a referral sanitorium for the operation of cases with COVID- 19 in Yogyakarta Province during the epidemic by a public emergency edict. Recently, several studies showed that the COVID- 19 epidemic affected pediatric surgery services still, the reports described the effect of the epidemic on pediatric surgery practice in general but did not specifically anatomize the number and type of surgeries affected by the outbreak and only handed tract commentary or perspectives. Therefore, we aimed to compare pediatric surgery practices, including the number and types of surgery, either voluntary or emergency surgeries or outpatient services, before the outbreak and during the COVID- 19 epidemic in our institution [2-3].

Materials and Method

Case samples

We retrospectively compared the pediatric surgery practices voluntary and emergency surgeries and outpatient services between the former one- time ages(March 2019 – February 2020), the last three months of that period(December 2019 – February 2020) before the outbreak and the three months(March – May 2020) during the COVID- 19 epidemic in our sanitorium. We chose the last three months before the outbreak (December 2019 – February 2020) to compare the pediatric surgical burden between the first three months of the epidemic and just before the outbreak in our institution. Also, in Indonesia, there are no seasonal variations, and the all academe schedule from fundamental until undergraduate academe is started between July and August every time.

We classified pediatric surgery cases' services in our sanitorium into four orders digestive, babes, urology and oncology. Also, we also defined those cases' services into two fresh orders laparoscopic. No

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laparoscopic surgery[4,5].

The Medical and Health Research Committee of our institution approved this study (KE/ FK/ 0653/ EC/ 2020). Written informed concurrence was attained from all parents of the pediatric cases who visited admitted to our sanitorium during the former one- time period (March 2019 – February 2020) before the outbreak and the three months (March – May 2020) during the COVID- 19 epidemic.

COVID- 19 assessment

The opinion of COVID- 19 using real- time polymerase chain response (RT- PCR) in the Special Region of Yogyakarta Province was conducted in five laboratories, including our institution. [6-7].

Discussion

We are suitable to show the effect of the COVID- 19 epidemic on abating the number of pediatric surgical services in our institution, including voluntary and inpatient services. These declining trends might be related to the fact that allnon- critical voluntary surgeries were temporarily suspended to ensure respectable sanitorium capacity to respond to the rapid-fire- fire spikes in COVID- 19 cases and drop the trouble of nosocomial transmission of COVID- 19 infection. This strictly executed policy was applied in nearly all hospitals around the world that were affected by the COVID- 19 epidemic, including Australia Finland and other Nordic countries and the United States of America(USA)(9). Also, the relative lack of medical resources due to the adding number of cases with COVID- 19 and the coinciding profitable downturn might also impact the operation opinions for pediatric surgery cases. It should be noted that detention of surgery for "time-sensitive" and critical conditions in children might affect their growth, development, and quality of life. Therefore, we still performed voluntary surgeries for babes and oncology cases. Still, our findings showed a declining trend in babes and oncology cases as well, with roughly1.5 –2-fold lower of these surgical procedures performed during the outbreak compared to before the epidemic. This difference might be related to the fact that multitudinous families were bothered about whether it's safe to bring their children to the sanitorium.

Although still considered controversial, we avoided laparoscopic procedures during the epidemic to minimize the trouble of aerosol transmission, as recommended by a former report. Several styles have been proposed to reduce the trouble of cross- infection of COVID- 19 during laparoscopic surgery a) properly abating the pressure of pneumoperitoneum; 2) avoiding the leakage of gas from the trocar places; and 3) gradually barring the aerosol via aspirator after pneumoperitoneum.

While our data showed declining trends in the voluntary surgical cases, the number of emergency procedures did not appear to be significantly affected by the epidemic. Our findings were similar to those of a former report. The number of laparotomies performed for perforated appendicitis was similar ahead and during the epidemic. In the USA, some hospitals applied on- operative operation for acute appendicitis, while other institutions continued to perform routine appendectomies. Especially, no agreement has been established yet for the operation of acute appendicitis during the COVID- 19 epidemic. The choice between conservative treatment and emergency surgical procedures with appendectomy depends on the resources of each institution.

Our government has applied restrictions on trip between businesses and/ or cosmopolises in the earlier period of the epidemic. Also, multitudinous families were bothered about whether it's safe to bring their children to the sanitorium, as noted by other reports. These data might affect our results.

Since the COVID- 19 epidemic might end in months, on June 1, 2020, our government announced a " new normal " policy to start administering acclimatizations of the public's quotidian exertion to the COVID- 19 epidemic, including streamlined changes in health care services. Accordingly, our pediatric surgery division in our sanitorium has tried to homogenize our services as follows each week, one major surgery will be performed every Tuesday, while two or three minor procedures will be listed and conducted on another working day. These programs started June 8, 2020.

Likewise, it has been recommended that all pediatric surgeons should communicate each other and benefit from the positive, synergistic goods from sharing exploits and swish practices during the epidemic with other associates[8].

Although several studies showed that the COVID- 19 epidemic affected pediatric surgery services our study has the following strengths we specifically analyzed the number and type of surgeries affected by the outbreak(vs. described the effect of the epidemic on pediatric surgery practice in generals. editorial commentary's. perspectives. especially, our findings are limited to one pediatric surgical center. These data should be considered during the interpretation of our study[9].

Our findings suggest that a comprehensive strategy is demanded either by the sanitorium or health quarter or indigenous pediatric surgeon association to avoid morbidity from neglected voluntary surgeries during the epidemic, including the proper comparison between the real trouble of COVID- 19cross- infection and the benefits of voluntary procedures [10].

Conclusion

The pediatric surgery practices in our institution have been severely affected by the COVID- 19 epidemic, including voluntary and inpatient services.

Conflict of Interest

No conflict of interest applicable to this composition was reported.

Acknowledgement

None

References

1. Barton-Davis ER, Shoturma DI and Sweeney HL (1999) Contribution of satellite cells to IGF-I induced hypertrophy of skeletal muscle. Acta Physiologica Scandinavica 167-4:301-305.
2. Beaulieu AD, Aarhus JL, Williams NH and Patience JF (2010) Impact of piglet birth zweight, birth order, and litter size on subsequent growth performance, carcass quality, muscle composition, and eating quality of pork. Journal of Animal Science 2767–2778.
3. Bee G (2004) Effect of early gestation feeding, birth weight, and gender of progeny on muscle fiber characteristics of pigs at slaughter. Journal of Animal Science 82-3:826-836.
4. Bidner BS, Ellis M, Brewer MS, Campion D, Wilson ER, et al. (2004) Effect of ultimate pH on the quality characteristics of pork. Journal of Muscle Foods 139–154.
5. Bloxham DP, Parmelee DC, Kumar S, Wade RD, Ericsson LH, et al. (1981) Primary structure of porcine heart citrate synthase. Proceedings of the National Academy of Sciences of the United States of America 78 :9 5381-5385
6. Campbell RG, Johnson RJ, King RH and Taverner MR (1990) Effects of gender and genotype on the response of growing pigs to exogenous administration of

porcine growth hormone. Journal of Animal Science 68-9 :2674-2681

7. Cerisuelo A, Baucells MD, Gasa J, Coma J, Carrion D, et al. (2009) Increased sow nutrition during midgestation affects muscle fiber development and meat quality, with no consequences on growth performance. Journal of Animal Science 87-2:729-739

8. Chang KC, da Costa N, Blackley R, Southwood O, Evans G, et al. (2003) Relationships of myosin heavy chain fibre types to meat quality traits in traditional and modern pigs. Meat Science 64-1:93-103.

9. Chin ER, Olson EN, Richardson JA, Yang Q, Humphries C, et al. (1998) A calcineurin-dependent transcriptional pathway controls skeletal muscle fiber type. Genes & Development 12(16):2499-2509

10. Da Costa N, Edgar J, Ooi PT, Su Y, Meissner (2007) Calcineurin differentially regulates fast myosin heavy chain genes in oxidative muscle fibre type conversion. Cells and Tissue Research 329-3:515-527.