

# Pediatric Surgery During the SARS-CoV-2 Pandemic

J.C. de Agustín Asensio

*Head of the Pediatric Surgery Service. Gregorio Marañón Maternal and Child Hospital. Madrid (Spain).  
President of the Spanish Society of Pediatric Surgery.*

The pandemic due to infection with SARS-CoV-2 virus, that occurred in cities and regions where the greatest number of cases has been concentrated, has not only overwhelmed the healthcare capabilities of hospitals, but has also forced the generation of more intensive care beds (ICUs) in a number greater than 300%. This gives an idea of the extent of the disease.

Pediatric surgery, a remote place in the scene of the pandemic, has not remained unaffected by this situation and has actively participated in many ways in its control and treatment. Proof of this are the various articles generated by the specialized Units and Services that will be publishing in our journal.

At first, pediatric surgeons participate in the organization of the surgical and emergency circuits in our own centers. We create safety protocols for both patients and professionals, guidelines that the Spanish Society of Pediatric Surgery published in different social media and on the website. At the exponential and maximum incidence phase of infection, we suppressed all non-essential surgical activities and restricted the interventions to urgent and oncological cases that could not be deferred. Later we generated an activity map for the de-escalation of the containment measures, to finally resume a quasi-normal activity. And all this in three months of alarm, uncertainty, information and misinformation, cooperation and solidarity with our colleagues and offering help in adult units.

We now know, from the data generated in our own country, that SARS-CoV-2 disease affects a small proportion of 0 to 18 year old patients (60% in men and 40% in women); this represents 1% of the population, knowing that the Autonomous Community of Madrid has concentrated 50% of the cases registered in Spain, and that the symptoms observed in children are mild: fever, cough and respiratory

symptoms. 5% evolve into severe symptoms, especially in infants and viral coinfections, which makes us to be cautious and to foresee a flare-up for the next autumn-winter.

Immunosuppressed pediatric patients do not have a worse prognosis, ICU admissions have accounted for 8-14% of all admissions with an average stay of 3-7 days, and mortality has been low, 0.1 to 0.3%.

At the end of the confinement period, we observed the appearance of a multisystemic inflammatory syndrome in schoolchildren, which, although rare, has been severe.

We conclude, thanking all the people who have contributed to a greater or lesser extent to fighting the disease, all the help provided has been key in saving the lives of the most seriously ill patients. Together we have made it possible for this to happen and we must never lose this spirit of collaboration of each and every one of us, both through direct help and through social media, which have been and continue to be so active. There are no barriers that cannot be overcome when we are together for the same purpose.

## REFERENCES

1. De Rojas T, Pérez-Martínez A, Cela E, et al. Covid infection in children and adolescent with cancer in Madrid. *Pediatr Blood Cancer* 2020; 67(7); e28397.
2. González Cortés R, García-Salido A, Roca Pascual D; SECIP Study Group on SARS-CoV-2 in Critically Ill Pediatric Patients. A multicenter national survey of children with SARS-CoV-2 infection admitted to Spanish Pediatric Intensive Care Units. *Intensive Care Med* 2020; 1-3.
3. Götzinger F, Santiago-García B, Noguera-Julián A, et al. COVID-19 in children and adolescents in Europe: a multinational multicenter cohort study. *Lancet Child Adolesc Health* 2020; 4: 653-61.