



Paediatric urology practice during COVID-19 pandemic

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Dear Editor,

Since December 2019, Coronavirus disease 2019 (COVID-19) has occurred unexpectedly and emerged as a health problem worldwide. Up to April, 14th 2020, more than 160,000 cases and over 20,000 deaths have been reported in Italy, one of the major countries involved. In contrast, only 1.2% of cases are paediatric with less than 10 deaths recorded worldwide [1].

Signs and symptoms of COVID-19 in adults are well known as one or more among fever, dry cough, dyspnoea, anosmia, ageusia, fatigue and lymphopenia; similarly the manifestations of paediatric patients are superimposable [2]. Indeed, when affected, most children present with mild clinical manifestations or asymptomatic course and usually have a good prognosis with recover within 1–2 weeks after the onset of the disease [3]: children could thus be silent carriers of this highly infectious virus [4].

Considering that in adult centers massive resources are dedicated to COVID-19 and paediatric hospitals have to prepare for possible acceptance of even adults, to avoid unnecessary hospitalization and risks of transmissions, surgical management in these centres must be reorganized. Therefore, we re-evaluated the priority of all children scheduled for surgery [5].

We divided urological procedures in three groups: the first is composed by emergent and urgent procedures that should be performed within few hours or the same day of diagnosis (Testicular torsion, Acute renal function impairment, Traumas, PUV, Paraphimosis, Priapism). The second is composed by scheduled procedures no longer deferrable that should be managed within few days/some weeks (Neoplasms, Non-symptomatic ureteral obstruction); finally, the third group includes all the procedures

deferrable until the end of COVID-19 emergency (Congenital abnormalities, Hernias, Phimosis, Hydrocele, Non-obstructive lithiasis). The priorities following the peak of infections will follow the usual treatment schedule, considering the risk classes highlighted for urological paediatric patients, while maintaining a state of alert. Moreover, during the emergency period the optimal surgical timepoint will be passed over for some diseases (hypospadias, cryptorchidism) with possible risk for suboptimal outcome or increased social embarrassment and should be prioritized in the waiting list after going through the peak of infections [2]. Furthermore, ordinary radiology service is stopped; intervention as nephrostomy placement should be adopted only for emergency and minimized also for possible domiciliary management problems.

Moreover, we reorganized access to the hospital: patients scheduled to undergo urgent or not deferrable planned surgery must be assessed for COVID-19; patients can be accompanied by only one parent; body temperature is measured with a thermal scanner before entering and a nasopharyngeal swab for SARS-Cov-2 is performed in a dedicated ward. If the test is negative, the children can be admitted to surgery.

In case of an emergency procedure or if the swab results positive, the surgery is performed in a dedicated theatre and following the COVID-19 pathway specifically created. So far, only 8 out of 150 scheduled surgical patients (emergent/urgent, not scheduled patients are out of this count), who attended the hospital for intervention, resulted positive for COVID-19 swab and their interventions delayed as not urgent. Finally, the Royal College of Surgeons suggests to prefer open strategy to the risks of laparoscopic in aerosol diffusion of the virus [6].

In conclusion, paediatric population seem to be quite safe, but children could be the

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perfect silent vectors of this disease: avoid unnecessary procedures and reassess priorities is mandatory in a pandemic scenario.

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None.

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