

Lettre d'information

Associations belges de pédiatrie

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Chers collègues

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COVID 19 Information Général

L'épidémie de COVID 19 est maintenant présente dans tout le pays et en tant que pédiatres, nous avons deux tâches : fournir les meilleurs soins à tous les enfants pendant cette situation difficile et nous protéger.

Un groupe belge spontané de pédiatres COVID19 (principalement des infectiologues pédiatriques et des présidents d'associations de pédiatrie) a été créé pour rassembler le plus d'informations possible dans des circonstances très difficiles et essayer de publier des directives claires que vous pouvez trouver sur le site web officiel Sciensano.

Stay save,

Stay strong!

Questions

Vous aurez de nombreuses questions. Les réponses que vous obtiendrez évolueront de jour en jour. Nous nous engageons à vous fournir régulièrement les informations les plus récentes et pertinentes pour votre pratique.



*It always
seems
impossible
until it's done*

Nelson Mandela

Les messages essentiels

Aujourd'hui, en tant que présidents des différentes associations de pédiatrie en contact permanent les uns avec les autres, nous souhaitons vous transmettre les messages essentiels suivants. Des conversations avec des pédiatres italiens et chinois nous ont fait décider de communiquer d'urgence.

1.

Si vous n'avez pas de vêtements de protection (au moins un masque, des lunettes et des gants), n'examinez pas les enfants malades (tant respiratoires que digestifs).

2.

Organisez dès que possible un circuit propre (= salles d'attente et consultations) où les enfants sont vus sans aucune plainte d'infection et séparez-le complètement d'un circuit "COVID19" où seuls les enfants malades sont vus et où vous (et les infirmières) pouvez travailler dans les conditions les plus sûres.

3.

Faites autant de télé (vidéo) consultation que possible

4.

Nous soulignons que la vaccination des enfants est essentielle pour éviter qu'en diminuant la couverture vaccinale, nous ne soyons bientôt confrontés à de "vieilles" infections telles que la rougeole, la coqueluche, l'*Haemophilus influenzae*... Nous faisons tout ce qui est en notre pouvoir pour trouver des solutions créatives à ce problème avec Kind en Gezin, l'ONE et les associations de médecins généralistes.

5.

En tant que pédiatres, nous devons veiller à ce que les soins de nos patients chroniques puissent se poursuivre sans discontinuité. Nous recherchons également des solutions créatives pour permettre à ces soins de se poursuivre dans des circuits propres.



Information des pédiatres Suisses



Steckbrief COVID-19 – Clinical characteristics in children and adolescents updated 18 March 2020

<http://www.kinderkliniken.insel.ch/de/coronavirus/>

Causative agent	SARS-CoV-2 ¹
Receptor	<ul style="list-style-type: none"> • Angiotensin-Converting Enzyme 2 (ACE2 receptor)² • convalescent sera from SARS-1 patients block SARS-CoV-2 entry via ACE2³
Transmission	<ul style="list-style-type: none"> • droplet, contact; aerosol? • ½ life in aerosol ~1 hour, ½ life on plastic/steel 6-8 hours (van Doremalen N, N Engl J Med 17/03/2020) and⁴ • viral transmission can start 1-2 days before the onset of symptoms («serial interval» < incubation period⁵; recovery of virus from NPA before onset of symptoms (Woelfel R, medRxiv)⁶ • viral RNA in NPA from children until 6-22 days after disease onset^{7,8} • viral RNA in feces from day ~5 to > 4 weeks after disease onset⁸⁻¹⁰ • viral load in NPA does not correlate with severity of COVID-19 in adults¹¹ • CDC recommends two consecutive negative RT-PCR tests within >24h before discontinuing isolation in hospitalized patients
Incubation period	4-6 days (range, 1 to >14 days)
Epidemiology	<ul style="list-style-type: none"> • basic reproduction rate R_0 2.2 (90% CI, 1.4-3.8)^{12,13} • high risk for «superspreader events» (dispersion parameter $k \downarrow$)¹³ • age <15 years: 0.9% of all cases (China CDC Weekly)^{14,15} • transmission to children mainly within families^{8,10,16} • mortality in symptomatic cases (adjusted case fatality rate) age 0-9 years, 0%; age 10-19 years, 0.25%; all ages, 1.5% (Riou J, medRxiv)
Clinical manifestations	<ul style="list-style-type: none"> • common: asymptomatic, e.g. in children of all ages¹⁷ [Dong Y] • common: fever (may be of short duration or absent)^{8,14,16-19} • common: cough^{8,17,19} • common: malaise, headache, myalgias • common: mild diarrhea^{8,10,14} [Dong Y] • infrequent: rhinorrhea, pharyngitis, wheezing^{8,14,16,19} [Dong Y] • co-infections reported (e.g. Influenza A/B, <i>M. pneumoniae</i>)¹⁷
Laboratory findings	<p><u>CBC differential, CRP, PCT, chemistry generally uncharacteristic</u></p> <ul style="list-style-type: none"> • common: leucopenia < 4.5 G/l; lymphopenia < 1.5 G/l, thrombocytopenia < 150 G/l^{14,19,20} • CRP/PCT at first presentation normal to moderately elevated^{8,17,19}



Microbiology	<ul style="list-style-type: none"> • RT-PCR from NPA (ifik, private laboratories and NAVI HUG Geneva) • seroconversion ~1 week after onset of symptoms (Woelfel R, medRxiv) • serum IgM/IgG tests under development, <u>not</u> routinely available²¹
Radiology	<ul style="list-style-type: none"> • conventional CXR: normal or non-specific findings • chest CT: unilateral or bilateral, uni- or multifocal, peripheral, commonly subpleural lesions; focal lesions typically with central consolidation and halo sign or ground glass opacities (GGOs)^{17,19,22} • <u>no</u> pleural effusion^{17,22} • <u>no</u> hilar lymphadenopathy^{17,22}
Clinical course	<ul style="list-style-type: none"> • common: asymptomatic (reported in infants^{7,8,16} and children^{8,23}) • common: upper respiratory tract infection (children and healthy adults)⁸ • common: pneumonia (with absent, mild or moderate clinical disease)^{17,19} • very rare: progressive lung disease with respiratory failure^{10,19}, reported in one study to be more common in infants [Dong Y] • <u>currently 1 pediatric fatal case in a 14-year-old reported</u> [Dong Y]
Clinical course - immunodeficiency	<ul style="list-style-type: none"> • severe disease in immunocompromised children has not been reported to date • mortality in adults with cancer is elevated (China CDC Weekly)
Clinical course - pregnancy	<ul style="list-style-type: none"> • infections reported mainly in 3rd trimester; characteristic complications have not been reported to date^{24,25} • no evidence for vertical transmission and fetal infection²⁵⁻²⁷
Clinical course - neonates	<ul style="list-style-type: none"> • asymptomatic infection in neonates (including normal chest CT) has been reported^{10,17,26} • complicated perinatal/postnatal courses among <u>non-infected neonates of COVID-19 infected mothers</u> have been reported²⁸
Treatment	<ul style="list-style-type: none"> • mainly supportive • currently no evidence from clinical trials available • drugs with antiviral activity against SARS-CoV-2 in vitro: remdesivir (nucleoside analog)^{29,30}, lopinavir/ritonavir (Kaletra®)³⁰, darunavir/ritonavir, chloroquine/hydroxychloroquine (Plaquenil®)³¹ • immunomodulation with tocilizumab (Actemra®, anti-IL6 mAb) reported • ACE2/viral entry blocker (TMPRSS2 inhibitors, e.g. Nafamostat) effective in vitro^{3,32} • <u>recommendations not to use NSAID (e.g. ibuprofen; upregulation of ACE2 receptor expression?) currently lack a firm scientific basis</u>
Prevention	<ul style="list-style-type: none"> • Inpatients: precautions according to Swissnoso/PIGS • Outpatients: precautions according to BAG, KAZA • Neonates: no separation of mother/child pairs (Swissnoso/PIGS, SGGG, WHO); <u>management according to local infection control policy</u> • IMPORTANT: scheduled routine immunizations in children ≤ 2 years of age should not be postponed (EKIF/BAG/SGP)

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