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Editorial

COVID-19

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The pandemic of coronavirus disease 2019 (COVID-19), a disease caused by a novel coronavirus (CoV), SARS-CoV-2, is causing substantial morbidity and mortality. The etiology of this illness is now attributed to a novel virus belonging to the coronavirus (CoV) family. An epidemic of cases with respiratory infections detected in Wuhan, China, was first reported to the WHO Country Office in China, on December 31, 2019. This new virus seems to be very contagious and has quickly spread globally. The estimate for severe cases was approximated at 5% based on experience from China. However, the World Health Organization's (WHO) estimate from China for severe and critical cases is near 20% [2]. Older age seems to be the highest risk for death. Mortality data from Oxford COVID-19 Evidence Service (25/3/20) indicates a risk of mortality of 3.6% for people in their 60 s, which increases to 8.0% for people older than 70 and to 14.8% for people over 80 s [3]. In addition, a very recent epidemiological study could show that already a small increase in long-term exposure to fine particular matter leads to a 20-times increase in COVID-19 death rate [4], showing that it is not only age and previous illnesses that predispose, but also the environmental conditions. In addition to respiratory disease, cardiovascular complications are reported to be a key threat in COVID-19 [5, 6].

In a second Editorial, F. Wenzel exposes this pandemic from a historical and socio-political perspective in a very interesting article [7].

In a feature about the European – Asian perspective Jung et al. present the development of COVID-19 in Germany and show a way to predict the time point at which no further new infections will occur using Normalized Case Number Curves (plateau day) [8]. Upon reaching the plateau day during a lockdown phase, a residual time-period of about 2-3 weeks can be utilized to prepare a safe unlocking period.

First experiences with abdominal contrast-enhanced ultrasound (CEUS) examinations are presented by the group of E.M. Jung [6]. In the stage of an imminent organ failure with significantly reduced kidney and liver function and microcirculation, CEUS can be used to show a narrowing of the organ-supplying arteries, as well as a delayed capillary filling of vessels near the capsule, a regional reduced parenchymal perfusion or an inflammatory hyperemia with capillary hypercirculation.

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