



Recommendations for patients with chronic liver disease or liver transplanted persons during the SARS-CoV-2 pandemic

Introduction

SARS-CoV-2 is a Coronavirus that is transmissible with droplets generated by speaking or coughing or by contact. It is therefore crucial to strictly observe the recommendations of the Federal Office of Public Health:



Keep your distance.



Wash your hands thoroughly.



Don't shake hands.



Stay at home.



Cough and sneeze into a paper tissue or the crook of your arm.



Always call ahead before going to the doctor's or the emergency department.

The disease is mild in about 80% of cases and most cases recover. However, risk factors for developing severe disease are advanced age (over 65 years) and the presence of underlying conditions such as hypertension, diabetes, cardiovascular disease, chronic respiratory disease and cancer. Men in these groups appear to be at a higher risk than women. There is for the moment no vaccination and no specific treatment (only supportive therapy). There is emerging evidence suggesting that individuals develop antibodies after infection: tests for antibodies in blood will be available soon, but we don't know yet whether they will be protective against reinfection (1).

Frequently asked questions about the liver and the Coronavirus infection (2,3):

I have a chronic liver disease: Am I at risk of developing severe disease?

It appears unlikely that SARS-CoV-2 infection causes liver damage to an amount that substantially contributes to the disease. If a routine visit is scheduled within the next weeks, contact your liver specialist to inquire whether your appointment can be postponed. The same holds true for non-urgent gastroscopy or colonoscopy or liver biopsy. Please ask your specialist about the possibility of a consultation using telemedicine.

I am taking immunosuppressive medications: Should I stop this treatment?

No! Please continue to take your medication as usual and refer to your family doctor or liver specialist if you have any new symptoms. Some data suggest that immunosuppression may even provide some protection.

I am liver transplanted: Should I modify my therapy?

No! Please follow your scheduled treatment without changing any dose. Do not attend the outpatient clinic for routine visits, instead ask for the possibility of having a consultation

using telemedicine. Check with your physician your vaccination status for influenza and pneumococcus.

I have a chronic liver disease: What medications can I take in case of COVID-19?

Do not take any antiviral treatment on your own initiative. Drugs (including alternative medicine) available from internet or other sources may have important side effects and/or they can have dangerous interactions with other drugs that you are taking. Always ask your general practitioner or liver specialist for advice. Avoid non-steroidal anti-inflammatory drugs if you have advanced chronic liver disease or cirrhosis and limit paracetamol (acetaminophen) use to 2 grams per day.

I have hepatocellular carcinoma and I take anticancer drugs: can I continue my treatment?

Yes. Unless there are major reasons related to side-effects of your treatment, keep taking your scheduled treatment.

Is SARS-CoV-2 dangerous in children with liver diseases or after liver transplantation?

There is no evidence that children with pre-existing liver disease are more vulnerable than their healthy peers. In general, children with SARS-CoV-2 infection have very mild symptoms. Although it has been shown in adults that SARS-CoV-2 infection can be associated with transient elevation in liver tests (1), pediatric data are still forthcoming. In general, any viral infection in children can lead to a transient elevation in liver test values which are of little clinical significance.

After pediatric liver transplantation: a publication from Bergamo, the epicenter of the pandemic in Italy and one of the largest pediatric liver transplantation centers in Europe, is extremely reassuring (4). First, evidence from previous Coronavirus outbreaks suggests that immunosuppression is not a risk factor for severe disease. Second, among the hundreds children in Bergamo both early and late after liver transplantation and other children on immunosuppressants for liver disease, there were only 3 who tested positive for SARS-CoV-2 and no reported case of COVID-19 pulmonary disease.

Based on this evidence,

- there is no need to modify treatment in children following liver transplantation
- usual and customary recommendations illustrated above apply
- routine vaccination schedule can be maintained
- local laboratory testing with telemedicine is favored to reduce exposure
- emergent hospitalization (all causes) is mandatory when indicated

Recommendations released on 3rd April 2020.

www.sasl.ch

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References:

1. Risk assessment on COVID-19, 25 March 2020 [Internet]. European Centre for Disease Prevention and Control. [cited 2020 Mar 30]. Available from: <https://www.ecdc.europa.eu/en/current-risk-assessment-novel-coronavirus-situation>
2. EASL-ESCMID Position Paper: Patients with advanced liver disease and transplant recipients require specific care during COVID-19 [Internet]. EASL-The Home of

Hepatology. 2020 [cited 2020 Apr 2]. Available from: <https://easl.eu/news/easl-escmid-position-paper-on-covid19-and-the-liver/>

3. COVID-19 Resources | AASLD [Internet]. [cited 2020 Apr 2]. Available from: <https://www.aasld.org/about-aasld/covid-19-resources>

4. D'Antiga L. Coronaviruses and immunosuppressed patients. The facts during the third epidemic. Liver Transplant Off Publ Am Assoc Study Liver Dis Int Liver Transplant Soc. 2020 Mar 20;