

## COVID-19

### Recommendations on extrarenal purification (dialysis)

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**Preface:**

- These recommendations are applicable to all the patients with confirmed Covid-19 infection, who were admitted to intensive care units.
- They consider parameters which are taken into account in the context of this epidemic only.

	Recommendations	Notes
<b>Prevent the onset or worsening of acute renal failure (ARF)</b>	If possible: <ul style="list-style-type: none"><li>• limit high PEEP levels</li><li>• avoid excessive restriction of compensation for circulating blood volume</li></ul>	<ul style="list-style-type: none"><li>➤ Some colleagues have warned about the frequency of reversible ARF in the COVID + patients who can be treated by adequate compensation for circulating blood volume and PEEP limitation or benefit an adequate prevention  (evaluating the benefit /risk profile relative to respiratory obstruction)</li></ul>
<b>When a dialysis procedure should be started?</b>	<b>Restrict the indications to those, which are as follows:</b> 1 / threatening drug-resistant hyperkalemia 2 / Severe drug-resistant metabolic acidosis 3 / Fluid overload pulmonary edema causing an aggravation of hypoxemia	In addition to these indications, an initiation of dialysis can also be considered: <ul style="list-style-type: none"><li>• if the plasma urea level exceeds 40 or 50 mmol/L</li><li>• and/or if the patient remains anuric for more than 4 days</li></ul>

<b>Selection of mode (1)</b>	Intermittent	<ul style="list-style-type: none"> <li>➤ For the following reasons: <ul style="list-style-type: none"> <li>- availability of units</li> <li>- intensity of surveillance (entry and exit into/out of the ward)</li> <li>- sessions of ventilation in ventral decubitus</li> </ul> </li> <li>➤ It is preferable to use an intermittent technique which allows to treat 3 to 4 patients on the same day.</li> <li>➤ <b>However, attention:</b> make sure that this intensity of use of intermittent mode is compatible with a loop or reverse osmosis device</li> </ul>
<b>Selection of mode (2)</b>	If the only available mode is continuous dialysis, 8-hour sessions with high dialysis doses are preferred (The prescription proposal in annexed thereto)	For the same reasons mentioned above
<b>Anticoagulation</b>	Heparin is more preferable than citrate	Although citrate has an advantage from the point of view of the filters' service life, the nursing time is more important than with heparin here. In addition, heparin should be preferred in accordance with the recommendations on the anticoagulation for COVID + patients