

Quick look resource guide: Delivering CRRT during COVID -19 Pandemic

How to maximise CRRT kit during RRT

Venous Access

1. Use Right Internal Jugular, with tip close to right atrium.
2. Aspirate 20 millilitres (mls) blood over 6 seconds (equivalent of 200 ml/min blood flow (Qb)) to assure central venous access catheter capability. This should be done from BOTH red and blue ports. If unable to do this easily, unlikely to achieve sufficient blood flow - troubleshoot access issues prior to commencing on CRRT machine. Remember **No flow - No Go!**

CRRT Equipment

1. Standard practice for priming set using Heparinised 0.9% Sodium Chloride

Treatment Regimen

1. Utilise patient's Ideal Body Weight (IBW) to guide treatment
2. Aim for 20-25ml/kg/hr (See Table for example of settings for a total effluent dose 20mls/kg. Refer to local policy for prescribed settings.
3. Offset Pre & Post replacement to Dialysis (e.g. 30% reduction of pre and post and move that 30% to dialysis to maintain effluent dose) – this may reduce TMP.
4. Have a high blood pump speed (200 ml/min plus) to improve filtration fraction and reduce risk of filter clotting.

IBW (kg)	BFR ml/min	Pre ml/hr	Dia ml/hr	Rep ml/hr	Tot ml/hr
50	200	175	750	75	1000
60	200	210	900	90	1200
70	200	245	1050	105	1400
80	200	280	1200	120	1600
90	200	315	1350	135	1800

Table extract reproduced with thanks from: King's Critical Care: CRRT Guidelines Covid -19 (Reference below)

Anticoagulation

1. Refer to local guidance to ensure effective anticoagulation -CRRT in patients with Covid -19 has shown premature clotting of filter /sets.

Effluent

1. No evidence contains Covid -19 (Virus too large to move through filter). Disposal as per normal practice

Considerations

1. Change your bags quickly: remember if blood pump moving only NO treatment and No anticoagulation (citrate) is administered! **Always have an effluent bag ready to connect!**
2. TMP >200 mmHg is an indicator that a growing inefficiency of the membrane is occurring

Further guidance available at:

<https://renal.org/wp-content/uploads/2020/04/RRT-COVID-final.pdf>