CVVHF—Continuous veno-venous hemodialfiltration

Diffusive and convective blood purification
Countercurrent dialysate flow
High permeability membrane utilized thus small and middle molecules removed
Qb = 50–200 mL/min Qf = 8–12 mL/min
Qd = 10–20 mL/min K = 20–40 L/24h

CVVHD—Continuous high flux dialysis

Diffusive and convective blood purification through a highly permeable membrane
Back diffusion occurs in membrane
Dialysate in countercurrent flow
Accessory pumps to control ultrafiltration
Replacement not required since fine regulation of filtration and backfiltration
Qb = 50–200 mL/min Qf = 2–8 mL/min
Qd = 50–200 mL/min K = 40–60 L/24h

CPFA—Continuous plasmafiltration adsorption

A highly permeable plasmafilter filters Fluid plasma allowing it to pass through a bed of adsorbent material (carbon or resins)
Fluid balance maintained
Can be coupled with CVVH or CVVHF/F
Qb = 50–200 mL/min Pfi = 20–30 mL/min
Qf, arterial flow; Qd, dialysate flow; Qb, ultrafiltration rate; UF, ultrafiltrate; UFc, ultrafiltrate control pump; V, vein.

SCUF—Slow continuous ultrafiltration (AV or VV)

Technique used for fluid control only
Convective mechanism
Ultrafiltrate isosmotic to blood
Used in arteriovenous or blood mode
Qb = 50–100 mL/min
Ultrafiltration rate controlled

CVVH—Continuous veno-venous hemofiltration

Convective blood purification through high permeability membrane
Ultrafiltrate replaced by replacement solution
Qf = 50–200 mL/min Qf = 2–8 mL/min
K = 12–36 L/24h
Can be used in arteriovenous mode

CVVHD—Continuous veno-venous hemodialysis

Diffusive blood purification through low permeability dialyser
Dialysate solution in countercurrent flow
No replacement fluid used
Qb = 50–200 mL/min Qf = 2–4 mL/min
Qd = 10–20 mL/min K = 14–36 L/24h
Small molecule clearance only
Can be used in arteriovenous mode