



Rancho Los Amigos National Rehabilitation Center

DEPARTMENT OF NURSING

ADMINISTRATIVE

POLICY AND PROCEDURE

SUBJECT: Hemodialysis: Emergency Disconnect Procedure Policy: A190.4

Effective Date: July 3, 2023

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PURPOSE: To provide safe care to Hemodialysis (HD) patients in case of an emergency.

POLICY STATEMENTS:

In the event of power failure during dialysis or a catastrophic emergency

PROCEDURE:

Power Failure During Dialysis Procedure

In case of power failure, the blood pump stops and the venous line clamp closes. The dialysate flow pump, heater, blood leak detector, and level detector are non-functional. All function lights go out. A steady, audible alarm will immediately sound for seven minutes that cannot be silenced with the Mute Key. It can be removed by removing the 9-volt battery from the back of the machine.

In the event of a power failure during treatment, the 2008T blood pump can be manually operated to return the blood to the patient or to keep the blood recirculating if a quick resumption of power is anticipated. The hand crank is attached to the back of the machine

Returning the Blood to the Patient Manually

1. Remove the bloodline from the venous line clamp. If you are performing single-needle dialysis, remove the pump segment from the single-needle pump
2. Replace saline bag with a fresh bag if necessary
3. Using the hemostat, clamp the arterial bloodline directly above the "T"
4. Open the saline line clamps and rinse the blood in the tubing below the "T" back to the patient. When the blood in the line has been rinsed back to the patient, close the saline line clamps
5. Clamp the arterial bloodline directly under "T". Remove the clamp on the bloodline above the saline "T" and open the saline line clamps
6. Open the pump door and flip the rotor latch outward
7. Align the slot and the spindle on the crank handle with the rotor latch and hole
8. Slide the crank handle in as far as it will go. The crank latch will protrude slightly from the crank handle
9. Rotate the crank clockwise and rinse back the blood with the saline (as per patient treatment). The blood should be returned under strict visual control
10. Clamp the arterial and venous bloodlines and the patient's arterial and venous access lines, and aseptically disconnect them

Keynote: Carefully observe the venous chamber and bloodline for the presence of air. Be sure no air will be infused into the patient

For Manual Blood Circulation Power Resumption procedure: See 2008T Operator's Manual P/N 490122 Rev Z, pgs. 168-169

Clump and Cut Procedure:

1. HD RN is responsible to disconnect hemodialysis by performing the clamp and cut procedure.
2. Each dialysis machine is provided with an emergency kit (4 clamps, 1 scissor & hand 1 hand crank)
3. Press the power button to shut off the machine
4. Clamp both access lines
5. Clamp both blood lines

6. Cut or unscrew the lines between the closed
Keynote: If you must cut the lines, cut ONLY the blood lines, NEVER cut patient access lines
7. Do not remove fistula needles. Leave the needles with the patient
8. Once the patient and nurse have been moved to a safe area, remove fistula needles

References:

Association for the Advancement of the Medical Instrument. *Dialysis: A Complex Modality for Life*. Retrieved 5/26/23

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Association for the Advancement of the Medical Instrument: ISO 23500 Series: *Ensuring Quality of Fluids for Hemodialysis and Related Therapies*

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CDC. *Recommendations for Preventing Transmission of Infections among Chronic Hemodialysis Patients*.

Fresenius Medical Care. Operator's Manual 2008T Machine Operator's Manual P/N 490122 Rev Z

Lippincott Procedure. *Hemodialysis Patient Assessment* Retrieved 5/26/23.

Los Angeles General Medical Center. Policy Hemodialysis Unit, Unit Structure Standards. Emergency Disconnect Procedure, Addendum H. Last revised 04/2020

Olive View Medical Center Department of Nephrology Policy and Procedure. Policy Number 11773, revised 07/03/23.

Rancho Los Amigos Infection Prevention and Control Policy number IC100

Rancho Los Amigos Policy C109- *Transfusion of Blood Products and Colloid Solution*

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New 05/2023