

NURSING SERVICE GUIDELINES HEMODIALYSIS

Guideline: Recirculation Studies for Dialysis Access



Policy Number Superseded:

Responsibility: Hemodialysis Registered Nurse

Effective Date:
June 2024

Purpose of Guidelines:

Initial Effective Date:
March 1996

Equipment:

Three 3ml green top blood tubes with labels
Three 3ml syringes
Two nurses
Three lab slips

Procedure:

- (A) Initiate hemodialysis per protocol.
- (B) After 15 minutes of treatment, turn off ultrafiltration rate. Two nurses should draw samples from the arterial and venous ports of the blood lines at the same time.
- (C) Immediately decrease blood pump speed to 50ml/min, set venous pressure upper limit to 400mm Hg, and clamp venous line.
- (D) When venous pressure reaches 400mm Hg, or at 30 seconds, draw a "peripheral" sample from the arterial port.
- (E) Label the 3 tubes and complete the lab order in Epic (3), for venous, arterial, and peripheral sites. Enter BUN and Cr, and specify recirculation studies.
- (F) When results are available, calculate results.

Peripheral value subtract arterial value X 100 = the % of peripheral value subtract venous value rejection. A 15% recirculation value is an expected norm. Any percentage value greater than 15% warrants an access evaluation or change.

References: ANNA Core Curriculum for Nephrology Nursing, 6th Edition 2015, Caroline S. Counts, Editor

Approved by:

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Review/Revision Completed by:

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