

# Potassium Removal with 1 meq/L Potassium bath in low volume home hemodialysis

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## Is Hemodialysis with a 1 meq/L bath acceptable?

- Numerous observational and retrospective databases have shown clinical problems with hypokalemia and excessive potassium removal
  - Mortality
  - Sudden Death
  - Dysrhythmia
- However, these observations have been with hemodialysis sessions of 3-4 hours with Qd of 500-800 ml/min and 1-2 day intervals between dialysis sessions
- However, when a session is reduced in time, with lower Qd and no "skip" day, what is the appropriate potassium bath?

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## Methods

- 70 consecutive patients undergoing HHD training with NxStage System One
- Dialysate effluent and blood samples collected during training
- Samples done with dialysis performed the previous day

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### Patient Data

	Mean Result
Patient Age	43 years
Weight	82.0 kg
Prescribed Dialysate	23.4 L
Ultrafiltration	1.3L
Time	148.9 min
spKt/V	0.57
Qd/Qb setting	0.43
Qd	167 ml/min
Qb	399 ml/min
Kt/V	0.57
Pre-dialysis K	4.24
<b>Potassium Removed</b>	<b>48.2 meq</b>

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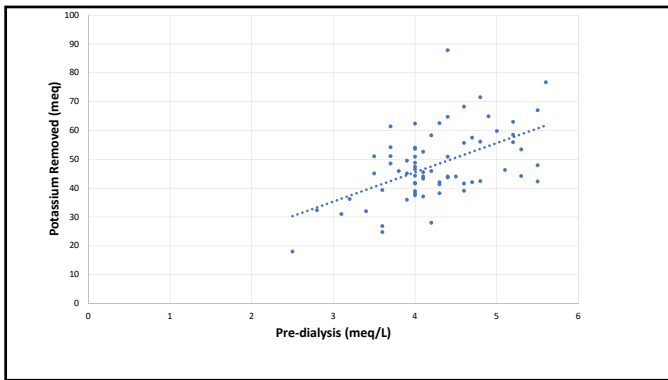
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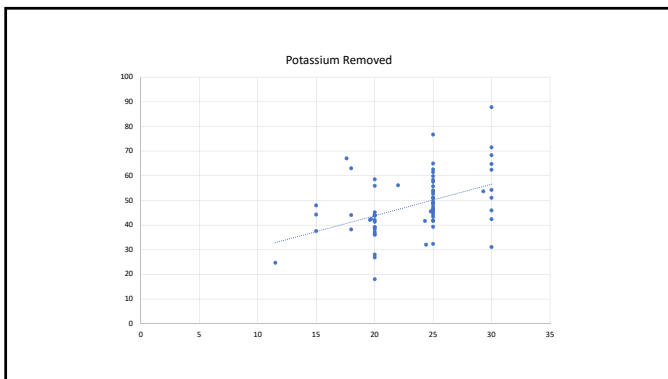
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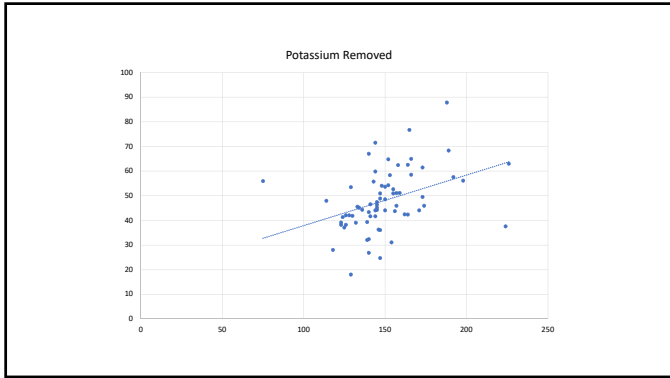
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Summary

- In patients with dialysis a day prior to another dialysis the potassium removal with a 1 meq/L bath is physiologic (i.e. in the range of acceptable dietary intake) for the majority of hemodialysis patients
- The total rate of removal (approximately 20 meq/hour) is approximately equal to the current standard practice of incenter hemodialysis with a 2 meq/L bath

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