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nPCR measurement method

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1. Clinically, we will encounter only limited data. For example, we only have data on urea nitrogen before hemodialysis and KT/V for single dialysis. How to calculate the normalized protein catabolic rate (nPCR)?
2. We introduce a simple formula, as followed.
$$nPCR(g/kg/d) = C0/[a + b * KT/V + c/(KT/V))] + 0.168$$,where $C0$ indicates pre-dialysis blood nitrogen in md/dl; a,b,c has different coefficients depending on the time od the dialysis schedule.
3. In our blood purification center, patients are dialyzed three times a week, either on Mondays, Wednesdays, Fridays or either Tuesdays, Thursdays, Saturdays, so that the time between the first dialysis sessions at the beginning of the week is longer.
4. Therefore, the following formula is used: beginning-of-week:
$$nPCR(g/kg/d) = C0/[36.3 + 5.48 * KT/V + 53.5/(KT/V))] + 0.168$$
5. As 1 mmol/l urea nitrogen equal 2.802mg/dl,
$$nPCR(g/kg/d) = 2.802 * BUN/[36.3 + 5.48 * KT/V + 53.5/(KT/V))] + 0.168$$
(urea nitrogen is in mmol/l).

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