Measurement of the 24-hour creatinine clearance (CLcr) is indicated when renally eliminated drugs are prescribed to older patients because of their diminishing renal function. However, in the elderly, the incomplete collection of 24-hour urine often makes it unreliable [1].

Most of the guidelines for drug therapy in renal insufficiency recommend to adjust drug dosages corresponding to the CLcr < 10, 10 < CLcr < 50, and CLcr < 50 ml/min [2]. From this point of view, most pre-scribers may be satisfied with a convenient index detecting CLcr < 50 ml/min even without actual CLcr in routine practices. For instance, Algotsson et al. [3] have proposed a simple measure of body weight (BW)/serum creatinine (Scr) ratio for dosage adjustments of digoxin in the elderly ( > 70 years). Thus, we attempted to ascertain whether the BW/Scr ratio could well distinguish patients with CLcr < 50 ml/min from those with CLcr > 50 ml/min.

The equation of Cockcroft and Gault [4], the most well-known one for estimating the CLcr, embodies the BW/Scr ratio as follows:

\[
CLcr = \left[1.2 \times (140 - \text{age})\right] \times \left(\frac{\text{BW}}{\text{Scr}}\right) \times \text{CF} \tag{1}
\]

where the CLcr is expressed in milliliters per minute, the age in years, the BW in kilograms, and the Scr in micromoles per liter; CF indicates the correction factor (CF = 1 for males and CF = 0.85 for females). Supposing patients from 70 to 100 years of age, application of age = 85 and CLcr = 50 to the equation yields (BW/Scr) CF = 0.75. We then considered the (BW/Scr) CF as an index

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A simple index has been developed for assessing the renal function of ambulatory patients over 70 years of age: the patients should be considered as having a \( \text{CL}_{\text{cr}} < (>) 50 \text{ ml/min} \), if the BW/Scr ratio < (>) 0.75 for males or < (>) 0.9 for females. As shown above, the use of the Scr only results in critical overpredictions of \( \text{CL}_{\text{cr}} \), while the predictability is significantly improved only by taking one more convenient factor, BW, into physician’s consideration. The simple index may contribute to safer drug prescriptions to the elderly, especially on an outpatient basis.

References

244
Nephron 1997;76:243-244
Sanaka/Takano/Mineshita