Primary Glomerulonephritis Outcomes in the Long Run

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Introduction

Significant proportions of hospitalised patients, and an even larger population in the community, are at higher risk of experiencing an episode of acute renal damage due to growing longevity and the presence of much co-morbidity (AKI). Survivors of an episode of AKI are now more likely to develop its long-term sequel due to improvements in short-term outcomes following an episode of AKI [1]. The lack of good biomarkers to identify risk of progression to chronic kidney disease (CKD) is complicated by the variability of risk associated with clinical factors such as the number of AKI episodes, severity, duration of previous AKI, and pre-existing chronic kidney disease, which has made predicting long-term outcomes in AKI survivors more difficult. As an important contributor to the rising incidence of CKD, there is a need to implement measures to prevent AKI in both the community and hospital settings, target interventions to treat AKI that are also associated with better long-term outcomes, accurately identify patients at risk for adverse consequences following an episode of AKI, and implement therapeutic strategies to improve these long-term outcomes. We examine the long-term renal and non-renal implications of AKI, existing biomarkers and non-invasive tests to detect on-going intra-renal pathology, and current and prospective therapy methods to help mitigate these negative long-term results [2,3].

Description

Over the previous decade, an increased frequency of risk factors for acute kidney injury (AKI) in the community, frequent interventions in high-risk groups, and standardisation in diagnosing AKI have all contributed to a measurable increase in AKI incidence, both in the community and in hospitals. A clinical state that was originally thought to be totally reversible has now been well established in animal models and human survivors as a predictor of future chronic kidney disease (CKD), speed the progression of pre-existing CKD, and carry a higher long-term risk of ESRD and early mortality. The International Society of Nephrology (ISN) recognised the importance of AKI prevention and launched the 0 by 25 campaign to minimise worldwide AKI mortality. In 2016, the ISN organised a CKD summit to identify and address important risk factors for CKD, emphasising the need of reducing AKI, which was identified as a modifiable risk factor for CKD. Extended repercussions of an episode of AKI and long-term management of AKI survivors are likely to gain increasing attention with commensurate increases in research and understanding over the next decade, as traditional risk factors for CKD and ESRD are better known and addressed [4,5].

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Conclusion

Acute kidney disease

The Acute Disease Quality Initiative (ADQI) 16 Workgroup published a consensus report to further bridge the knowledge gap between AKI and CKD. They further defined the term AKD and emphasised the importance of the post-AKI period, especially in patients with on-going renal pathophysiological processes. It was proposed that effective therapies implemented during this important time period could change the course of AKI, resulting in better long-term outcomes. The Workgroup defined AKD as "AKI stage 1 or greater, as defined by KDIGO, 7 days following an AKI initiating incident." The group also proposed that AKD be considered a "post-AKI phase" rather than a "pre-CKD stage," with AKD outcomes including recovery, recurrence of AKI, progression of AKD to CKD, and/or death.

AKI's natural progression

Concerns about the long-term impact of an episode of AKI, in addition to its short-term impact on hospitalizations and mortality, have gotten a lot of attention in recent decades. Based on the severity and duration of the insult, the researcher summed it up and established three patterns. Following an acute injury, renal function may return to near-baseline levels, remain stable for a period of time, and then move to CKD (subclinical CKD), or renal function may only be partially restored, resulting in "established CKD." In the third scenario, if the injury was severe and/or long-term, it would demand the use of Renal Replacement Therapy (RRT) from the start.

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Conflict of Interest

There are no conflicts of interest by author.

References

- Chembo, Caroline L., Mark R. Marshall, Laurie C. Williams and Robert J. Walker, et al. "Long-term outcomes for primary glomerulonephritis: New Zealand Glomerulonephritis Study." *Nephrol* 20 (2015): 899-907.
- Ponticelli, Claudio and Richard J. Glassock. "Posttransplant recurrence of primary glomerulonephritis." Clin J Am Soc Nephrol 5 (2010): 2363-2372.
- Koskimies, O., J. Vilska, J. Rapola and N. Hallman. "Long-term outcome of primary nephrotic syndrome." Arch Dis Childhood 57 (1982): 544-548.
- Manno, Carlo, Diletta Domenica Torres, Michele Rossini and Francesco Pesce, et al. "Randomized controlled clinical trial of corticosteroids plus ACE-inhibitors with long-term follow-up in proteinuric IgA nephropathy." Nephrol Dial Transpl 24 (2009): 3694-3701.
- Moranne, O., L. Watier, J. Rossert and B. Stengel, et al. "Primary glomerulonephritis: An update on renal survival and determinants of progression." Int J Med 101 (2008): 215-224.

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