

## 【Symposium 3-3】

### Management of Hemorrhagic Stroke in Patients with CKD

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Chronic kidney disease (CKD) patients experiencing acute intracerebral hemorrhage (ICH) present unique challenges in clinical management due to their altered hemostasis, vascular fragility, and complex medication requirements. This review summarizes current evidence-based approaches for managing ICH in CKD patients. Blood pressure management is crucial, with recommended systolic targets between 130-140 mmHg, while avoiding aggressive reduction below 130 mmHg due to increased mortality risk. For anticoagulation-related hemorrhage, specific reversal strategies are essential: warfarin-related bleeding requires 4F-PCC and vitamin K1; NOAC-related bleeding needs specific reversal agents (idarucizumab for dabigatran, andexanet alfa for Xa inhibitors); and heparin reversal requires protamine. In antiplatelet-related hemorrhage, platelet transfusion and desmopressin may be considered. Regarding renal replacement therapy, continuous venovenous hemofiltration (CVVH) is preferred over intermittent hemodialysis, with heparin-free protocols recommended in the acute phase. Supportive measures include maintaining hemoglobin levels  $\geq 10$  g/dL and considering adjunctive therapies such as estrogen, cryoprecipitate, or tranexamic acid. Regular monitoring of neurological status, coagulation parameters, and renal function is essential. Long-term management focuses on risk factor control and careful evaluation of antithrombotic therapy resumption. Given the higher mortality and poorer outcomes in CKD patients with ICH, individualized treatment approaches considering comorbidities and previous medications are crucial. This comprehensive management strategy aims to optimize outcomes in this high-risk population, though further research is needed to establish CKD-specific treatment protocols.

Keywords: chronic kidney disease, intracerebral hemorrhage, blood pressure management, anticoagulation reversal, renal replacement therapy

