

## **Acute Kidney Injury Recommendations Published**

# Acute Kidney Injury

French intensive care and nephrology societies have published recommendations for AKI in the perioperative period and in intensive care units (ICUs). The document is published open access concurrently in *Anaesthesia Critical Care & Pain Medicine* and *Annals of Intensive Care*.

The recommendations were developed by experts from the <u>Société française d'anesthésie et de réanimation (Sfar)</u>, <u>Société de réanimation de langue française (SRLF)</u>, <u>Groupe francophone de réanimation et urgences pédiatriques (GFRUP)</u> and <u>Société française de néphrologie (SFN)</u> according to the <u>GRADE method</u>. Thirty-three recommendations were formally developed, of which 9 are strong (GRADE 1±), 16 are weak (Grade 2±) and 8 questions could not have the GRADE® method applied.

The recommendations cover 8 areas, from detection and diagnosis through to recommended follow-up of AKI patients.

#### **AKI Detection and Diagnosis Strategies**

On diagnosis the experts recommend using the KDIGO criteria to define AKI and to characterise the severity of AKI. Based on current evidence, they recommend that renal biomarkers are not used to diagnose early AKI. The experts note that there is currently no randomised controlled study allowing experts to recommend the measurement of one or several renal biomarkers in order to diagnose AKI, which is already associated with renal dysfunction. However, they write that "the literature gives a strong signal that these biomarkers are useful tools that facilitate the early diagnosis of acute kidney damage." They also recommend that the Doppler renal resistive index is not used to diagnose or treat AKI, but the technique should be further evaluated.

See Also: Biomarkers for Acute Kidney Injury: Where Are We Now?

# AKI Risk Assessment, Prevention

The guidelines recommend looking for risk factors of AKI related to the patient's susceptibilities and/or to exposures. In high-risk situations, they suggest monitoring urine output and serum creatinine to detect the development of AKI and apply the appropriate preventive measures.

They recommend non-specific AKI prevention strategies: crystalloids instead of colloids for fluid loading, not administering hydroxyethylstarch (HES) in the ICU and use of balanced solutions in case of large fluid vascular loading.

### Other Recommendations

The guidelines also provide recommendations on nephrotoxic agent management, pharmacological strategies for prevention and treatment, nutrition and assessment of renal function recovery after AKI. They recommend systematic follow-up by nephrologists of patients who present with AKI, regardless of their early renal function recovery.

In an accompanying editorial, Rinaldo Bellomo and Carol Hodgson praise the "outstanding and useful recommendations", noting that it is likely that the current recommendations will lead to decreased practice variation and better patient outcomes. They also highlight on the question of fluids "Although some issues surrounding fluid choice remain unresolved, the completion of further studies in the next 3 to 5 years will provide important additional data that will enable necessary updates in due course."

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