The Association of Early Corticosteroid Therapy With Clinical and Health-Related Quality of Life Outcomes in Children With Septic Shock

Study Question

Is there an association between early corticosteroid therapy in early sepsis and patient-centered clinical outcomes?

Study Population

155 (44%) received early corticosteroid therapy

352 children with sepsis

Early therapy was defined as initiation of hydrocortisone or methylprednisolone on study day 0 or 1.

Vasoactive-inotrop support-free days
0.72 (0.65 to 2.29), p = 0.370

Duration of vasoactive-inotrop support
0.37 (1.47 to 0.72), p = 0.503

Survival to month 1 without new morbidity
OR: 1.37 (0.89–2.28), p = 0.218

PSD of HRQL or mortality at month 1
OR: 0.70 (0.40–1.23), p = 0.212

Mortality at month 1
OR: 0.63 (0.25–1.50), p = 0.298

PSD of HRQL among month-1 survivors
OR: 0.74 (0.38–1.41), p = 0.360

HRQL = health-related quality of life, OR = odds ratio, PSD = persistent, severe deterioration of HRQL below baseline.

PSD = Specifically, HRQL scores (Pediatric Quality of Life Inventory or Functional Status version 4.0 (PSY-4) persisting >25% below the baseline HRQL.

Propensity score method based on:
- age, sex, study site, PRISM III score, highest first-day Vasoactive-inotrop score

Conclusion and Authors’ Next Steps

After adjusting for variables with the potential to confound the relationship between early corticosteroid administration and clinically meaningful end points, there was no improvement in patient-centered outcomes associated with early corticosteroid therapy.