

Does the choice of colloids interfere with the outcome in critically ill patients? A critical appraisal

In this issue of the Journal, fluid management has been discussed in terms of a restricted or liberal approach.^[1] Actually, two aspects have to be highlighted in this context:

1. Acute caregivers will inherently restrict fluids in patients at risk for edema (cerebral or pulmonary edema, acute respiratory distress syndrome, cardiac decompensation).
2. The discussion between liberal and restrictive management devolves to high volume resuscitation by crystalloids versus low volume optimization by colloids.

A restrictive policy appears logical when patients are at risk for developing edema or in whom restrictive fluid administration permits established homeostasis and stable hemodynamics without deterioration of renal function. The efficiency of low volume of colloids has been demonstrated in several settings, such as acute normovolemic hemodilution,^[2] before and during spinal anesthesia (coloadng or preloading, respectively)^[3] and reversal of shock.^[4] Therefore, a restrictive attitude is desirable, avoiding over-optimization of preload and blind correction of fluid responsiveness.

Nowadays, there is a debate on the use of hydroxy-ethyl starches (HES) in critically ill patients, especially in those with septic shock. Literature appears to blame HES containing colloids for most of the harmful effects. Several studies in the critical care setting demonstrated either no benefit or harm of HES. However the use of HES solutions and hyperoncotic solutions in septic shock and burn patients,^[5] leads more frequently to acute kidney injury.^[6,7] This was true not only in the few patients in whom cumulative doses exceeded 250 ml/kg of HES,^[5] but also when recommended doses were administered. Furthermore, coagulopathy has been described in some studies,^[7,8] but denied by others,^[9] and is attributed to dilutional hypofibrinogenemia.^[10,11] It seems that main

effects are closely related to the cumulative dose of the colloid.

These and other findings led to the publication of warnings and recommendations by European and American authorities, stating that HES is contraindicated in sepsis and burns, as well as in severe coagulopathy and liver dysfunction.^[12] In perioperative care, HES solutions continue to be used in the setting of acute hypovolemia, in the absence of renal failure or significantly increased bleeding risk, though they are not really advantageous.^[13] The corner stone in this debate is the correct use of HES with respect to a maximal dosing per 24 h (30 ml/kg/day HES 6%). In any case, a cautious and judicious use of these and other hyperoncotic solutions is warranted: Colloids are drugs, they have indications, maximum dose, and well-defined contraindications. Further studies have to elucidate their safety and harm in the perioperative setting.

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Conference Calendar 2015

Name of conference	Dates	Venue	Name of organising secretary with contact details
8 th Annual Conference of Association of Obstetric Anaesthesiologists — India and 1 st World Obstetric Anaesthesia Congress AOACON 2015	September 11 th , 12 th and 13 th , 2015	Hyderabad	Dr. Sunil T Pandya Perna Anaesthesia and Critical Care Services & Fernandez Hospital, Hyderabad, India aoahyderabad2015@gmail.com www.aoaindia.com www.pernaanaesthesia.com www.fernandezhospital.com
6 th National Airway Conference of All India Difficult Airway Association (AIDDA) NAC 2015	September 18 th -20 th , 2015	Kashmir	Prof. Imtiaz Naqash. Organising Chairman HOD and Chairman Department of Anaesthesiology and Critical care Sheri Kashmir Institute of Medical Sciences (SKIMS) Srinagar, J&K Org.Secy: Dr. Zulfiqar Ali Telephone: +9194190 86761 Email Id: nacsrinagar2015@gmail.com Website: http://www.aidiaa.org/NAC2015/NAC_home.html
5 th National Conference of Academy of Regional Anaesthesia of India AORA 2015	September 25 th -27 th , 2015	J N Tata Auditorium, National Science Symposium Complex, Sir C V Raman Avenue, Near-Indian Institute Of Science, Bengaluru, Karnataka 560012	Dr. Kumar M V Organizing Secretary AORA 2015, "Anantha" D 2177, 8 th Main, 16 th E Cross, Sahakarnagar, Bangalore - 560 092. Mob: 09845025236 Email: aoraindia2015@gmail.com Phone: 080 2331 3291
AIIMS Neuroanaesthesia Update 2015	September 26-27 th , 2015	JLN Auditorium, AIIMS, New Delhi	Prof. Parmod K Bithal (Org. Chairman) Dr. Girija P Rath (Org. Secretary) Organising Secretary, AIIMS Neuroanaesthesia Update 2015 Department of Neuroanaesthesiology, 6 th Floor, Room No.9 Neurosciences Centre, 6 th Floor, Room No.9 AIIMS, New Delhi - 110029, India Tel: +91-11-2659 3474 / 3793; Mobile: +91 9810602272, 9868398204 Email: girijarath.aiims@gmail.com/ girijarath@yahoo.co.in Website: www.aiimsneuroanaesthesia.org