Dextran 70

Essential medicine status

Section: 11. Blood products, coagulation factors, and plasma substitutes > 11.5. Plasma substitutes

EMLc | ATC codes: B05AA05

Indication	Hypovolaemia ICD11 code: 5C70.1
INN	Dextran
Medicine type	Chemical agent
List type	Core (EML) (EMLc)
Additional notes	Polygeline, injectable solution, 3.5% is considered as equivalent.
Formulations	Parenteral > General injections > IV: 6% injectable solution
EML status history	First added in 1979 (TRS 641) Changed in 1984 (TRS 722) Changed in 2005 (TRS 933) Changed in 2013 (TRS 985)
Sex	All
Age	Also recommended for children
Therapeutic alternatives	polygeline (ATC codes: B05AA06) Parenteral > General injections > IV: 3.5% injectable solution
Patent information	Read more about patents.
Wikipedia	Dextran 70
DrugBank	Dextran 70

Summary of evidence and Expert Committee recommendations

Fluid therapy plays an important role in the treatment of trauma patients with substantial blood loss, as well as in patients with burn injuries. The review prepared for the 19th meeting of the Expert Committee focused on these indications for the use of colloids in children. No evidence from randomized controlled trials could be identified (1, 2). All articles reviewed indicated that there was very little evidence available either for or against the use of colloids in children. Volume replacement with colloids is considerably more expensive than with crystalloids. The International drug price indicator guide (3) shows that the supplier median price for dextran 70 is almost 12 times higher than that for normal saline. In view of the low quality of evidence available on the clinical questions reviewed, the lack of evidence for the superiority of colloids compared with crystalloids in critically ill patients in general, and the higher cost of colloids, the Expert Committee decided that there is no justification for the inclusion of specific colloids for volume replacement in the EMLc. However, colloids would be added to EMLc for consistency with the EML and for use when safer alternatives are not available. References: 1. Akech S, Ledermann H, Maitland K. Choice of fluids for resuscitation in children with severe infection and shock: systematic review. BMJ. 2010;341:c4416. http://dx.doi.org/10.1136/bmj.c4416 PMID:20813823 2. Boluyt N, Bollen CW, Bos AP, Kok JH, Offringa M. Fluid resuscitation in neonatal and pediatric hypovolemic shock: a Dutch Pediatric Society evidence-based clinical practice guideline. Intensive Care Med. 2006;32(7):995-1003. http://dx.doi.org/10.1007/s00134-006-0188-4 PMID:16791662 3. International drug price indicator guide. Cambridge (MA): Management Sciences for Health; 2012.