primary studies - published RCT

Peripheral intravenous line survival and phlebitis prevention in patients receiving intravenous antibiotics: heparin/hydrocortisone versus in-line filters.

Code: PM8123947 **Year:** 1994 **Date:** 1994 **Author:** Roberts GW

Study design (if review, criteria of inclusion for studies)

randomized trial

Participants

Patients with cystic fibrosis receiving intermittent i.v. antibiotics

Interventions

receive their drugs either through an in-line filter using a drug-free infusate or with no filter and an infusate containing heparin 500 units and hydrocortisone 10 mg/L. Infusion sites were assessed daily

Outcome measures

phlebitis incidence and i.v. line survival times

Main results

Both the hep/hc and filter groups were similar in terms of phlebitis incidence and i.v. line survival when analyzed separately for both short and long lines. Long lines displayed markedly prolonged survival times and reduced phlebitis compared with short lines.

Authors' conclusions

The effectiveness of i.v. filters in excluding the large particle load introduced by i.v. antibiotics and hence in reducing the subsequent phlebitis makes them a useful alternative to the use of hep/hc. The use of filters in this patient group may offer advantages in terms of ease of use and a possible decrease in hep/hc-related problems. Long lines offer practical advantages over short lines for patients requiring longer term i.v. access.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/616/CN-00099616/frame.html

See also

Ann Pharmacother. 1994 Jan;28(1):11-6.

Keywords

pharmacological_intervention; Catheterization- Peripheral; Intravenous; Continuous; non pharmacological intervention - devices OR physiotherapy; Anti-Bacterial Agents; Bacterial Infections; Infection; heparin; Hydrocortisone; Other drugs; Steroids; Anti-Inflammatory Agents;