

Reduction of femoral arterial bleeding post catheterization using percutaneous application of fibrin sealant.

Authors: Ismail S, Combs MJ, Goodman NC, Teotia SS, Teates CD, Abbott RD, Fechner RE, Nolan SP, Powers ER, Spotnitz WD

Publication Date: 1995

Abstract:

The number of cardiac catheterizations performed yearly is growing with correspondingly increasing amounts of morbidity, complications, and hospital costs. This study suggests that fibrin sealant instillation via an arterial sheath at the completion of femoral catheterization may improve hemostasis. Results using fibrin sealant in 12 unheparinized dogs documented significant reductions (McNemar's exact test) versus control for groin ecchymoses (1 versus 8, $P = .008$) and radiolabeled hematoma formation (0 versus 7, $P = .016$). Also swelling was less in the fibrin sealant treated groins when compared to control groins (1 versus 6, $P = .125$), but failed to reach statistical significance. Results in eight heparinized dogs (activated clotting time 374 ± 22 , mean \pm SEM) revealed a statistically significant reduction in signs of gross bleeding in the fibrin sealant-treated groins (1 versus 8, $P = .016$). This method may contribute to reduced morbidity, complications, and length of hospitalization. It may also allow for earlier patient mobilization after cardiac catheterization.