Our objective was to compare the efficacy of 70% isopropyl alcohol (IPA) containing either 0.5% or 2% CHG for antiseptic skin preparation in patients undergoing coronary artery bypass grafting.” Casey et al (2015).

Reference:


Comparison of the efficacy of 0.5% or 2% chlorhexidine gluconate for skin preparation http://ctt.ec/3ddSc+ @ivteam #ivteam

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Abstract:

Background: Chlorhexidine gluconate (CHG) is often recommended for skin antisepsis; however, the most efficacious concentration is currently unclear. Our objective was to compare the efficacy of 70% isopropyl alcohol (IPA) containing either 0.5% or 2% CHG for antiseptic skin preparation in patients undergoing coronary artery bypass grafting.

Methods: One hundred patients were randomized to 1 of the 2 CHG concentrations. The
designated antiseptic was applied to the skin of the operative site of patients before long saphenous vein harvest. Bacterial counts on the skin incision site were determined at various time points to assess any immediate and persistent antimicrobial activity. The number of patients developing surgical site infection was also determined.

Results: The total numbers of microorganisms on the skin 2 minutes after skin antisepsis and after wound closure was lower with 2% CHG/70% IPA compared with 0.5% CHG/70% IPA (P = .033 and P = .016, respectively). Six of 41 patients in the 0.5% CHG/70%IPA group developed a superficial surgical site infection compared with 2 of 44 patients in the 2% CHG/70% IPA group (relative risk, 3.22; 95% confidence interval, 0.63-22.75; P = .147).

Conclusions: Isopropyl alcohol (70%) containing 2% CHG compared with 0.5% CHG reduces the number of microorganisms detectable on a surgical patient’s skin perioperatively.

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