Length of Time Post-Operative Midsternal Incisions Need a Intact Dressing

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Problem: The question guiding this study was the longstanding protocol of changing midsternal incision dressings on post-op day number two and removing the dressing on post-op day number four. Our concern over this practice was related to the increased cost in product as well as nursing time, added pain and stress on our patients, and the limited visual observation of the incision related to the dressing. Therefore, the clinical question was asked, "Among post-op aged birth through 21year old cardiac patients with midsternal incision dressings, does changing the dressing on post-op day 2 versus removing the dressing reduce the incidence of post-op infections?

Evidence: Databases: CINAHL, Medline, and PubMed. Key Words: Surgical site infections, Midsternal incision care, pediatric wound infections, wound healing, and dressings. Twenty articles were reviewed and nine were included in the synthesis.

Strategy: ACE Star

Practice Change: A new protocol will be written based on our evidence to be carried out on the Cardiac Step-down unit and in the Cardiac intensive care unit.

Evaluation: Compliance with the new protocol will be evaluated through nursing documentation of midsternal surgical incision care and effectiveness will be evaluated through the existing surgical site infection surveillance. It is anticipated that cost will be reduced for both supplies and nursing care time while increasing patient and family satisfaction.

Results: The recommended practice change is expected to be implemented after presentation to the cardiothoracic surgeons. Regardless we will be monitoring SSI as our outcome.

Recommendations: It is recommended that midsternal surgical sites remain covered for 24-48 hours post operation.

Lessons Learned: There is very little evidence available for our pediatric patient population regarding midsternal surgical incisions; most information available refers the adult population.

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