VTE Prevention in the Pediatric Surgical Population

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Introduction

Pediatric Venous Thromboembolism (VTE) was once thought to be a rare event. Several studies have now proven that VTE in the Pediatric Surgical Population does occur, perhaps in greater frequency. There are no current national guidelines on prevention of VTE in the pediatric population.

The current national VTE guidelines are based on studies done on adults. Some of the elements can be applicable to the pediatric population, especially in the post pubertal phase. The multidisciplinary Perioperative Quality Team worked to define a nurse driven protocol for VTE prevention in the pediatric surgical population.

Literature Review

Limited data is available on the true incidence of VTE in the pediatric surgical population. (Baker, Sherrod, McGwin, Ponce & Gilbert, 2016).

In the pediatric population there is a lack of data on the risk of VTE after surgery and therefore limited evidence to base recommendations for prevention in the pediatric surgical population. (Humes, Nordenskjold, Walker, West & Ludvigsson, 2015).

There has been an increase in VTE diagnosis at childrens' hospitals from 2001 to 2007. (Raffini, Huang, Witmer, Feudtner, 2009).

Methodology

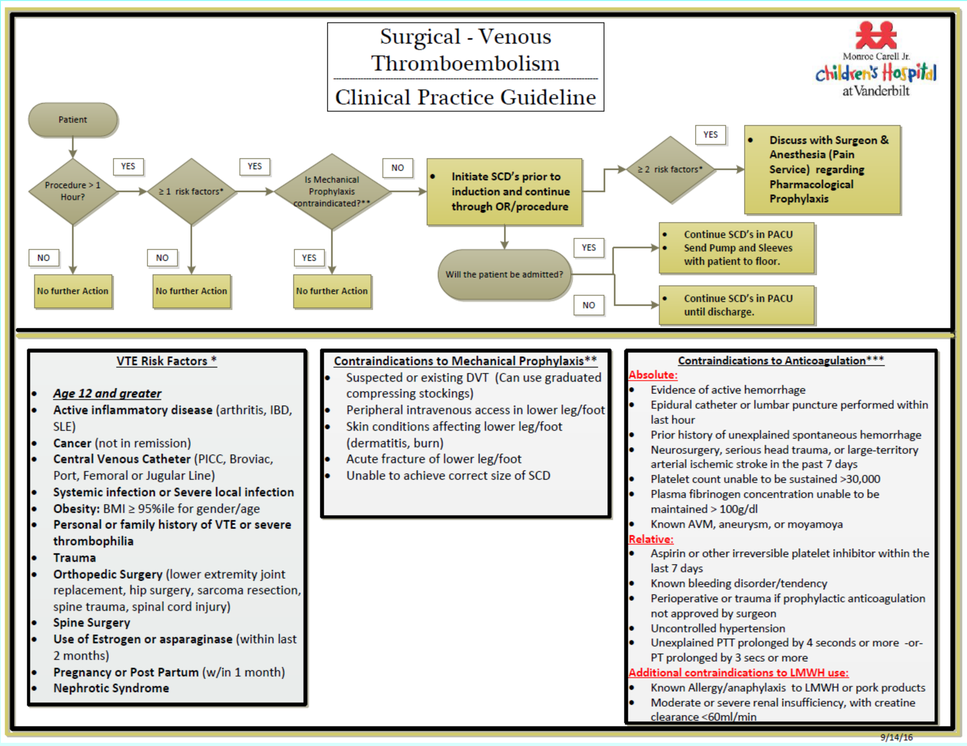
The multidisciplinary perioperative quality team reviewed the literature, recommendations from other children's hospitals and searched for national guidelines.

There are no national guidelines for VTE prevention in the pediatric surgical population.

Cincinnati Children's Hospital has a Best Evidence Statement on VTE prevention in the pediatric population.

The Perioperative Quality Consultant worked with the key stake holders on a clinical practice guideline for our hospital.

Methodology (continued)



Implementation

Holding and OR nurses were educated on the new VTE protocol for surgical patients.

PDSA cycle used 1 service line at a time for 4 weeks.

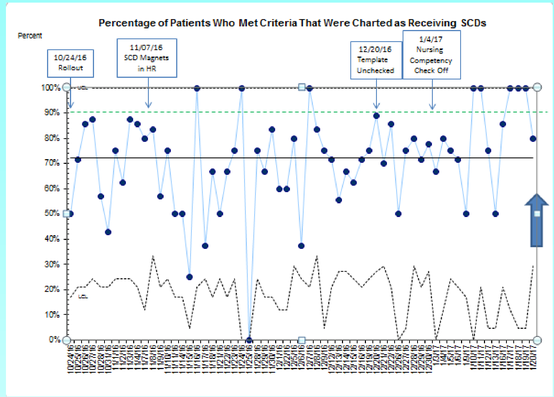
All services (excluding cardiac) began using clinical practice guideline on October 24, 2016.

Clot Stopper Superhero Patrol

Conclusions

Goal at 90 days was for patients who meet VTE prevention criteria based on clinical practice guidelines that SCDs be used and documented in 90% of the cases.

Evaluation of data at 90 days is currently ongoing with recent data points measuring 100%.



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