A NON-INVASIVE TREATMENT ON VASCULAR INJURY CAUSED BY AN INVASIVE MEDICAL PROCEDURE IN LATE PRETERM INFANT

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BACKGROUND

Vascular injuries in infant are rare and most commonly occur in the process of obtaining vascular access. Especially central venous catheter (CVC), are increasingly used for administration of medication, parenteral nutrition, and blood sampling. Acute vascular injuries caused by CVC-related to thrombosis (CVC-thrombosis) can potentially jeopardize perfusion or attenuate venous outflow, which may resolve by itself or cause severe complications, ultimately threatened limb survival. Due to lack of evidence, management of CVC-thrombosis varies among neonatal intensive care units.

OBJECTIVE

Alertness complication from an invasive medical procedure by using CVC and showed safeties a non-invasive medical treatment as the management by using anticoagulation and or thrombolytics of preterm infant vascular injury, then an invasive treatment which is surgical management.

CASE

A late preterm infant, 1700-g, 34-weeks, boy with an acute limb lower extremity after CVC insertion into femoral. We treated with a noninvasive medical treatment in CVC-thrombosis used to determine direction of care in the event of vascular injury. The boy was successful treated with heparin acetylsalicylate acid, and color Doppler ultrasound monitoring, without any surgery management and no incidence of major bleedings.

Figure 1. Patient with acute limb ischemic on left inferior extremities

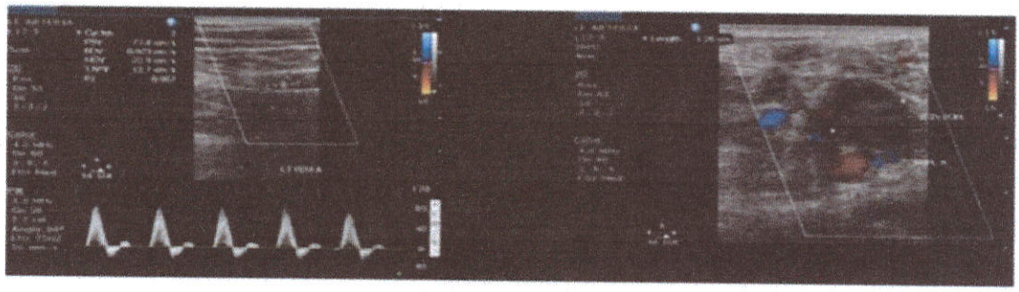

Figure 2. Color Doppler ultrasound

CONCLUSION

Every invasive medical procedure or treatment, there is more complication than non - invasive, such as CVC-thrombosis or infection after surgical management. However, there are no clear recommendations for thrombosis treatment in preterm infants with a high risk of cerebral bleeding already. Wait and see policy is applied to this condition This case demonstrates the efficacy to use anticoagulation and thrombolytics in late preterm infant with this thrombus.

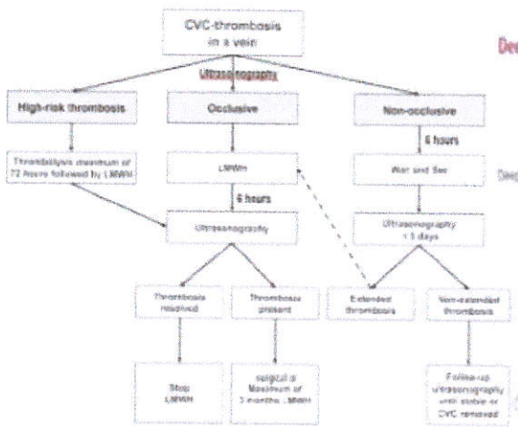

Figure 3. CVC-thrombosis in a blood vein alogarithm

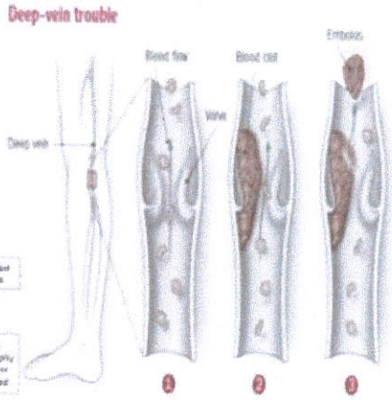

Figure 4. Vascular anatomy

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