2024 Coagulation (Heparinisation)

Permission to print: Yes

Category Coagulation

Severity Good Catch Near Miss

Duration of incident: minutes

Description: Loading dose of 35,000u Heparin given to patient via the proximal lumen of a PA

catheter, as standard for this anaesthetist. After 3 minutes, a sample was drawn for an ACT, which finished at 158 seconds with visible clot. A second sample was drawn for a second ACT, which finished at 155 seconds with visible clot. A further 15,000u Heparin was given again via the proximal lumen of the PA catheter. After a further 3 minutes a sample was drawn for an ACT, which finished at 155 seconds with visible clot. (The surgeon, throughout this period was putting pressure on the perfusionist to "just turn on cardiotomy/just go on bypass"). At around this point the anaesthetist remembered that he had pulled back the PA catheter in readiness for a Maze procedure, and in checking under the drapes, could see clear liquid within the PA catheter sheath (most likely all the Heparin) A further 35,000u Heparin was given and flushed through the distal lumen of the PA catheter. A subsequent ACT stopped at 629 seconds. CPB was

started and the case proceeded as normal.

GOOD CATCH - what went well Perfusionists refused to turn on cardiotomy suckers or go on CPB until the ACT

was above 400 seconds

What could we do better Heparin could have been given earlier to allow more time for ACT testing and

subsequent trouble shooting

Preventive actions Surgeon asked to give Heparin earlier in procedure. Incident was discussed with all

perfusion staff, all surgeons, and anaesthetic staff, with emphasis on waiting for the

pre-bypass ACT EVERY case

Type of incident: Management

Hospital incident filed: Yes

Ext Authority Advised No

Discussed with team: Yes

Knowledge issue No

Rule issue No

Protocol issue No

Skill issue Yes

Team Issue Yes

Chance Chance event: Yes

Patient outcome variance f Nil

Commentary This incident the second incident relating to inadequate heparinisation recently

reported to PIRS and illustrative of a problem that due to various factors is not uncommon. The good catch on this occasion is the perfusionist resisting pressure from the surgeon to "just turn on cardiotomy/just go on bypass". The hierarchy of the operating room can be intimidating especially for junior staff when there is pressure to

proceed requiring support. PIRS Ed.