2023 Circuit Error (Red cell processor)

Permission to print: Yes

Category Circuit error

Incident type Good Catch No Harm Incident

Duration of incident: minutes

Description: After coming off bypass and just as protamine was starting an increased amount of bleeding

occurred - the arterial line was still insitu and the perfusionist was able to fill but soon got into the situation where the reservoir was mainly crystalloid, and the cell saver reservoir was becoming full. The CATS SMART machine was set up and had primed normally with no errors however at the time when we really needed the volume to be available for re-infusion there was an issue - the bowl was able to fill with scavenged blood but there was no movement of the washed/concentrated blood into the bag - we changed to emergency mode - but the problem persisted no blood was being pumped into the bag and the reservoir was not emptying. No errors or alarms. The anaesthetist needed to emergently transfuse a unit of donor PRBC and then we quickly clamped off the cell saver reservoir while we inserted a new autotransfusion set/bowl. The new bowl worked and we were then able to process and infuse

the patient's own blood without further need of donor blood.

After the case we examined the set and discovered a fault in the tubing that would carry the concentrated blood to the bag - it was narrowed/crimped in appearance - leading to the priming with plasmalyte part going ok with no errors but being too restrictive to allow the much more viscous concentrated red cells to pass up into the bag - leading to the failure to

process the patient's scavenged blood

GOOD CATCH - what went well Able to maintain patient hemodynamics while new consumable was inserted -

recognition that troubleshooting was not working and that a change of consumable was required. Good communication with team while sorting out the issue. Two

further defective kits identified.

What could we do better In hindsight a closer inspection of the consumable for kinked tubing obviating and avoidable

transfusion.

Preventive actions Consumable was kept and returned to the company. A Riskman and product complaint form

filled out and submitted. Every subsequent set moving forward is examined in the area where problem was detected - another faulty set was observed the next week at time of set up and

not used - preventing a similar issue from occurring.

Type of incident: Equipment

Hospital incident filed: Yes

Ext Authority Advised No

Discussed with team: Yes

Patient outcome varianc Mild