

Cell Salvage

A Team Approach to Getting Your Own Back

Malcolm Chambers
Transfusion Practitioner
University Hospitals Leicester





Objectives

- Current practice in the UK.
- The risks / SHOT Data.
- How a team approach can help.
- How to incorporate teamwork into ICS.



Current Practice in the UK

- **Health Service Circulars**
BBT1 /BBT2 1998- 2002.
- Operating Department Practitioners (ODP) are the main users of ICS equipment.
- Staff in UK tend to operate ICS machines in conjunction with other roles/tasks.
- Now used routinely in UK Hospitals
- Safe

SHOT ICS Reported Incidents 2007-2015



- **Number of Incidents reported = 125**
- **50 related to equipment or operator error.**
- **24 -severe hypotension** (Most related to the use of LDF).

SHOT 2014

Cell salvage using modern equipment is clearly very safe as the denominator (number of cell salvage procedures) is very high.

Cell salvage is now standard care in many specialties with a good safety record which should encourage its use if clinically indicated.

ICS in the Routine Setting



- Able to Plan in advance.
- Staff able to undertake ICS in conjunction with other tasks, responsibilities.
- No need for designated operators.
- Safe practice.



SHOT Reported incidents

- Hartmann's solution used to rinse swabs.
- ICS Processed Blood stored in fridge.
- Collection of blood following the use of a topical cellulose-based haemostatic agent.
- ICS blood not labelled with correct patient details.
(Not always noted by staff on ward post-op)
- Reinfusion of ICS Blood beyond the expiry time.



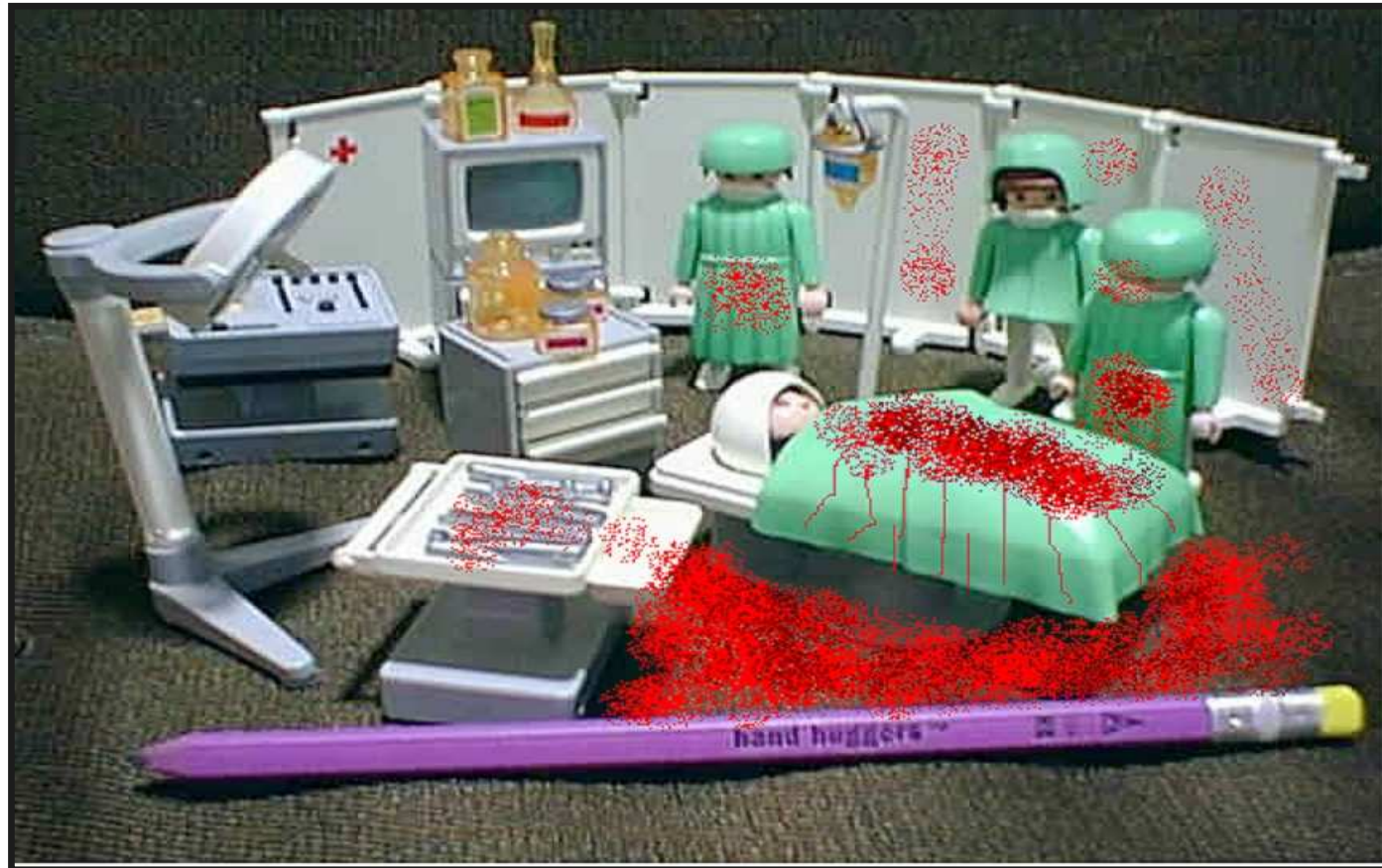
Team Approach to ICS

- **Clinical teams**
(To agree default list of ICS cases)
- **Clinical booking teams**
(To identify patients for ICS on theatre lists).
- **Ward staff aware of expiry time of ICS blood.**
- **Theatre team aware of the contraindications in ICS .**
(Not just the member of staff operating the machine).

Intra-operative Cell Salvage: 2014 A Survey of Equipment and Practice across the UK

- 59% of anaesthetic trainees said they did not receive theory or practical training in ICS.

ICS in Emer/acute settings.





Main issues with ICS in Emer/acute setting

- Unable to Plan in advance.
- Dynamic & quick changing situation.
- Multiple tasks to perform.
- Often out of hours.
- Minimal amount of staff available/on duty.
- Unable to mobilise staff.
- Stressful situation.
- High blood loss.



SHOT Incident

- Major morbidity and intensive care admission as a result of cell salvage not being set up early enough during a caesarean section.

Undertaking ICS in Emer/Acute setting requires Team Work



ICS in Emer/Acute Setting



Who else could help with getting ICS started in this team?



Who could Help with ICS in Emer/Acute setting

- ODP – To busy in the early stages ?
- Nurse - To busy / unable to ?
- Anaesthetist – To busy / don't know how too!
- Surgeon – To busy , don't know how too,
and would you let them!!.
- Designated operators - Ideal / but we work in the NHS!

Key to ICS is Collection



Is there anyone in this Team?

HCA

To Busy





Utilizing the team to set up ICS collection

- **Non Registered Staff (HCA's).**

Trained to set up Collection.

(May need to use Citrate (ACDA) as Anticoagulant).

- **Formal Training**

Including formal assessment.

Make sure staff/Dept outside of Theatres aware of ICS





In Summary

- Don't rely solely on individual staff.
- Utilise the Whole team.
- Make sure everyone involved with ICS is aware of what you can and can't do and their roles.
- Inform other staff/departments, some of their patients may be eligible for ICS.
- Ensure patients that are eligible for ICS get ICS.

Thank You

