Transfusion may be a common procedure but it can end in disaster

Stakes are high when handling and managing blood products for transfusion – here’s how nurses can prevent errors and keep patients safe

By Lynne Pearce

With around 2.5 million units of blood components transfused in the UK each year, it’s a relatively common and safe nursing procedure – but errors are potentially catastrophic.

‘I suggest that staff see blood transfusion in the same way as a transplant,’ says Mooi Tay, a transfusion practitioner at Severn Pathology, part of North Bristol NHS Trust. ‘If you make a mistake, you cannot get it back. It can kill the patient. You have to get it right.’

In a previous role as a clinical skills trainer, Ms Tay was involved in upskilling nursing staff and other healthcare professionals, including medical students, in practices such as taking blood and administering intravenous therapies. Training continues to be a key activity in her current role.

‘We use patients’ stories as examples, so they can see what might happen if their practice is poor,’ says Ms Tay, who qualified as a nurse in 1992. ‘It shows how costly errors can be, putting it into perspective.’

Held together by Sellotape

In one real-life scenario, blood was collected before a clinical decision was made not to transfuse.

The collected blood was stored in the fridge, and then later the decision was reversed. However, when staff went to collect the blood, they noticed drops of blood on the floor; the bag had been pierced, and the inlet sealed with Sellotape.

‘The blood could have been contaminated,’ says Ms Tay. ‘Sellotape is not sterile. It could have been life-threatening.

‘When we share this story, many of the nurses can’t believe it really happened, but it did.’

Last year’s annual report from Serious Hazards of Transfusion (SHOT) – an independent, professionally-led scheme that highlights adverse events and makes recommendations – says that of 20 patient deaths, 14 were preventable.

Report incidents

Learning from near-misses is vital to avert future such events, says SHOT, so incidents have to be investigated thoroughly and systematically. Reporting any such incidents is another of Ms Tay’s responsibilities, with the errors she sees often stemming from lack of rigour in checking a patient’s details.

‘Blood can be labelled incorrectly,’ she explains. ‘It can happen because one person takes the blood while another labels it. Blood may also be taken from the wrong patient.

‘During training, I emphasise that if the patient is capable, you must get them to verify their details. It’s the best way to avoid any issues, but still many staff forget.’

Although Ms Tay’s organisation is in the process of introducing electronic tracking of blood, sample-taking is not currently included. ‘Our next objective is to gain funding for this, so we can reduce incidents,’ she says.
Continued shortages of nursing staff, combined with the pressures of rising workloads, can leave staff more vulnerable to making mistakes. ‘We used to talk about winter pressures, but it’s all year round now,’ says Ms Tay.

While she advises staff to go at their own pace, she recognises the challenges. ‘When people are rushing, they may take blood and...’

**Tips to help you ensure blood transfusion safety**

» Make sure you understand your organisation’s policies and procedures and how to comply with them, advises clinical nurse specialist Kathleen Wedgeworth. ‘Monitor your own practice, to continue to be safe’

» Do one thing at a time, says transfusion practitioner Mooi Tay. ‘When you try to multitask, that’s when things go wrong’

» Check with your patient throughout, says Ms Tay, and examine wristbands for those who may not be able to communicate clearly, whether through illness, learning difficulties or dementia. ‘That’s the most reliable source of information we have about our patients’

» Ask patients open questions, Ms Tay advises. ‘Don’t ask “is your name X?”, but “what is your name?”’. If patients are confused, hard of hearing or nervous, they may agree without listening’

» Understand that nurses play a key role in educating patients about the transfusion process, says Ms Wedgeworth. ‘In my experience, patients will ask nurses a lot of questions, sometimes because they don’t understand what the doctor has said’

» The less anxious you are, the less anxiety your patient will have. ‘Be confident in your practice,’ says Ms Tay. ‘And if you have a patient where you’re struggling to take blood ask a colleague for help’

» Don’t rely solely on technology to reduce errors. ‘Nothing beats a person doing all the checks properly,’ says Ms Tay. ‘Staff can become complacent, thinking technology’s the be-all and end-all – but it’s not’

» If there is an incident, be transparent about mistakes, says Ms Wedgeworth. ‘Learn from what’s happened and share that too’

» Serious Hazards of Transfusion (SHOT) recommends using a checklist at the patient’s bedside as a final precaution, before a transfusion begins. This should include positive patient identification (full name, date of birth and hospital number), alongside confirmation the blood component is correct and has been prescribed for the right patient at the right time, and any specific requirements
‘If somebody fails to follow procedure at any point and makes a mistake, it can carry through, unnoticed, until the patient gets the wrong blood type and has a reaction.’

Kathleen Wedgeworth (pictured, below right), clinical nurse specialist for intravascular fluid management

then hand it on to someone else for labelling. We emphasise doing one thing at a time, but I know it’s easier said than done sometimes.’

To improve safety, staff shortages and gaps in skill mix must be addressed, says the SHOT report, which recommends NHS providers move away from blame and instead concentrate on what they can learn.

‘In our organisation we have a no-blame culture,’ says Ms Tay. ‘We want nurses to own up, so we can look into what happened and see how we can support them.’

Managers play a significant part in encouraging their staff to be open about any mistakes, she believes. ‘If it’s not reported, you don’t know what’s really happening, can’t address it and it becomes a vicious circle.’

Processes exist for a reason

Failing to follow procedures is another common cause of mistakes, says Kathleen Wedgeworth, a clinical nurse specialist for intravascular fluid management at Northern Devon Healthcare NHS Trust. ‘Staff can be too busy and cut corners,’ says Ms Wedgeworth. A large part of her role involves educating and training all staff involved in the transfusion process.

Everyone needs to be aware of the responsibilities of their role, she believes. ‘There are a lot of stages, with many different staff involved at each,’ says Ms Wedgeworth.

‘If somebody fails to follow procedure at any point and then makes a mistake, it can be carried right through, going unnoticed, until it’s at the bedside, when the patient gets the wrong type of blood and has a reaction.’

Blood sampling is a particularly crucial element. ‘Despite all the education and training, we find we continue to have what we call “wrong blood in tube” cases,’ says Ms Wedgeworth.

This means that when a blood sample is tested, it is found that it cannot belong to the patient named on the label. ‘These are the frightening ones, as it’s at the very start of the process, so can potentially go right through,’ she says.

Positive patient ID

To prevent this kind of incident, she stresses the importance of positive patient identification – a standard procedure that should be universal. ‘We ask who are you and what’s your date of birth,’ says Ms Wedgeworth. ‘We should also be checking the details the patient tells us, against their name band. If they’re unable to communicate, making sure their name band is correct is vital.’

When a blood sample is taken, staff are asked to label it while they’re next to the patient, with information taken from their name band. ‘As soon as you walk away, you could get distracted, someone could mention another person’s name and you write that on the label. It’s also easy to pick up someone else’s notes,’ she says.

While errors can always be reduced, human factors mean it’s almost impossible to eradicate them completely. ‘A lot of the time you can’t blame individuals, it can be the processes,’ says Ms Wedgeworth. ‘But we need to keep learning from our mistakes.’

Read our CPD article on the safe transfusion of blood products

Because blood transfusion is so significant, it is important that CPD is considered. Visit tinyurl.com/blood-transfusion-guidance for insights from the National Institute for Health and Care Excellence.

tinyurl.com/learn-transfusion

Learn Blood Transfusion is a suite of e-learning courses produced by Health Education England, in partnership with NHS Blood and Transplant.

tinyurl.com/blood-management

Patient Blood Management is a multidisciplinary and evidence-based approach to optimising care. Includes patient information leaflets, such as The Amazing You, which is designed for children needing a transfusion.

Lynne Pearce is a health journalist