Interim Bulletin

Wrong site interventions

27 November 2017

This interim bulletin contains facts which have been determined up to the time of issue. It is published to inform the NHS and the public of the general circumstances of events and incidents and should be regarded as tentative and subject to alteration and correction if additional evidence becomes available.
Notification of Event and Decision to Investigate

The Healthcare Safety Investigation Branch (HSIB) was notified by an acute Trust of an incident in which a patient received a ‘wrong site’ regional nerve block prior to an orthopaedic procedure.

Nerve blocks are a type of regional analgesia in which local anaesthetic is injected near a specific nerve or bundle of nerves to block the sensation of pain. When used within surgery, their benefits include improved post-operative pain control, a reduced need for strong pain medication post-procedure and an earlier discharge from hospital.

A wrong site block can lead to the additional risk of nerve damage, local anaesthetic toxicity and delayed discharge due to reduced mobility and dexterity.

The HSIB’s initial review of this case has identified factors that may be common across other surgical interventions which the HSIB consider would merit further investigation. Therefore, the proposed scope of the HSIB investigation has been extended to consider this event in the context of wrong site interventions in general. The Chief Investigator has authorised a full investigation as it met the following criteria:

Outcome Impact – What impact has a safety issue had, or is having, on people and services across the healthcare system?

Wrong site interventions have significant potential to cause physical and psychological harm. Such events may also create a requirement for further treatment and a loss of confidence in the care that patients may receive in the future.

Systemic Risk - How widespread and how common a safety issue is this across the healthcare system?

Evidence gathered from the National Reporting and Learning System (NRLS) suggests that despite existing NHS processes intended to prevent wrong site interventions, such events
continue to occur throughout the healthcare system. Although safety initiatives have been developed and implemented to address this issue at both local and national levels, their effectiveness has been difficult to measure.

**Learning Potential – What is the potential for an HSIB investigation to lead to positive changes and improvements to patient safety across the healthcare system?**

Examination of the patient pathway, from referral to completion, has potential to identify wider systemic risks relating to interventional procedures. The HSIB seeks to determine whether existing preventive mechanisms correctly address and minimise these risks.

**History of the Event**

A 69-year-old patient attended a specialist orthopaedic treatment centre at an acute hospital in 2017 for elective surgery on his right ankle. It was planned and discussed with the patient, as part of the pre-operative assessment on the day of surgery, he should have a general anaesthetic, supplemented by two local anaesthetic nerve blocks. The surgical site was marked and an anti-embolic below knee stocking was put on the left leg (non-operative leg).

Before the procedure was started, a World Health Organisation (WHO) Safer Surgery Checklist was completed and a Stop Before You Block (SBYB) check was completed for the *popliteal fossa nerve block* (back of the leg above the knee joint). The right leg *popliteal fossa nerve* was performed by a senior anaesthetic trainee under the supervision of a consultant anaesthetist. This procedure was undertaken while the patient was awake, in the prone position (lying on his front). The patient was then repositioned to the supine position (lying on his back) and a general anaesthetic was administered.

Following induction of anaesthesia, it was noted that the patient’s blood oxygen saturation levels were decreasing. In response, the senior anaesthetic trainee and the operating department practitioner (ODP) focussed on repositioning the airway to address the oxygen saturation issue. While the airway intervention was ongoing, the consultant proceeded with the saphenous nerve block (medial aspect of knee joint). A SBYB check was not carried out for the
second block. Following administration of the local anaesthetic, it was realised that the saphenous nerve block had been carried out on the left leg in error.

The error was recognised immediately and reported to the Theatre Coordinator without delay. As a result, the patient came to no harm and the surgical procedure was carried out as planned. In the recovery area, the consultant anaesthetist spoke to the patient to make him aware of the error and apologised. The patient remained in hospital overnight as planned and was discharged the following day.

The Trust has theatre suites on several sites which surgical and anaesthetic staff work across as part of their work plan. There are also occasions when changes are made at short notice which can require the movement of any member of the theatre team to a less familiar environment to prevent the cancellation of a theatre list. The structure of the Trust has been designed so that not all theatre areas are operationally managed under the same directorate; some align with a clinical speciality. This has created difficulties with implementing and monitoring safety standards and initiatives.

**National Context**

Since 2010, a number of safety initiatives have been implemented, focused on reducing the risk of wrong site events.

These include:

1. The **Never Event Framework** (NHS England, 2015) which was introduced in England in 2009, and reviewed in 2016. Never Events are defined as ‘Serious Incidents that are wholly preventable because guidance or safety recommendations that provide strong systemic protective barriers are available at a national level and should have been implemented by all healthcare providers’. The framework ‘is designed to support safety improvements by defining Never Events in a way that means occurrence of a Never Event indicated possible weaknesses in how an organisation manages fundamental
safety processes’. A wrong site nerve block is classified as Never Event within the wrong site surgery category.

2. The **WHO Surgical Safety Checklist** (World Health Alliance for Patient Safety, 2008) which was mandated for all patients in the NHS undergoing a surgical procedure in 2010.

3. The **Stop Before You Block** (Royal College of Anaesthetists, 2010) initiative was introduced, with the backing of the Royal College of Anaesthetists and the Association of Anaesthetists, for patients receiving a regional nerve block as part of their procedure. This provides a toolkit for anaesthetic teams to help prevent wrong site block from occurring.

4. The introduction by NHS England in 2015 of **National Safety Standards for Invasive Procedures (NatSSIPs)** (NHSI England, 2015) to provide a framework for producing **Local Safety Standards for Invasive Procedures (LocSSIPs)**. It was intended that LocSSIPs should be created by multi-professional clinical teams to standardise key elements of procedural care across all clinical environments where invasive procedures occur.

### Identified Safety Issues

The following safety issues were identified during the HSIB initial review and will form the basis for the ongoing investigation:

- The use of checklists to prevent wrong site interventions.
- The impact of distractions affecting the situational awareness of a surgical team including changes in a patient's condition.
- The efficacy of visual prompts as effective barriers to safety risks.
- The continuity of staffing within operating theatres, both individual areas and theatre suites across different locations.
- Approaches to the development, testing and implementation of safety initiatives.
- Standards and standardisation of procedures, both within individual specialities and between operating sites.
Next steps

The HSIB investigation will continue to explore the identified safety issues and welcomes further information that may be relevant, regardless of source. The HSIB will report any significant developments as the investigation progresses.

References


