This presentation should be used in conjunction with the full publication:

‘Patient Safety Update including the summary of reported incidents relating to anaesthesia 1 January to 31 March 2013.

Safe Anaesthesia Liaison Group

PATIENT SAFETY UPDATE

Including the summary of reported incidents relating to anaesthesia

01 JANUARY TO 31 MARCH 2013

THIS DOCUMENT AIMS TO ACHIEVE THE FOLLOWING:

► Outline the data received, the severity of reported patient harm and the timing and source of reports
► Provide feedback to reporters and encourage further reports
► Provide vignettes for clinicians to use to support learning in their own Trusts and Boards
► Provide expert comments on reported issues
What is the Safe Anaesthesia Liaison Group (SALG)?

- A joint committee of the RCoA, AAGBI and NHS England
- SALG has a data sharing agreement under which critical incidents reported by hospitals to the NRLS are provided for wider sharing
- The Patient Safety Update is a quarterly publication which is the mechanism for sharing reported data
- This presentation provides a précis of the Patient Safety Update for June 2013
What is the Safe Anaesthesia Liaison Group (SALG)?

Why discuss the Patient Safety Update at M&M?

• Raise the profile of patient safety within departments.

• Learn from the experience of others.

• Use the slides that you find useful (there is no need to use them all).

• Slides should be used with the details in the full safety update.

• Add information from your own department.

• Feed back to SALG@rcoa.ac.uk.
On the SALG Agenda

Fire in ICU

- A fire was caused by an oxygen cylinder on a patient's bed in the ICU at RUH Bath in 2011.
- An account of the event is available in *Anaesthesia* and the *BJA*.
- SALG have produced a Safety Notification to help ensure that the event is not repeated.
On the SALG Agenda

Remifentanil incidents

- Critical Incidents have occurred on occasions when remifentanil has been used outside the operating theatre including in maternity.

- Further information is being collated and will be published by SALG.
On the SALG Agenda

Arterial infusions

- A NPSA Rapid Response Report was triggered following use of 5% glucose as the flush solution for arterial lines.

- Samples taken showed very high glucose levels, leading to inappropriate treatment with insulin, and resulted in patient deaths.

- Incidents continue to be reported to the NRLS and will be highlighted in a future SALG publication.
On the SALG Agenda

Kinking of ET tubes

- A problem relating to kinking of ET tubes when they become warm has been brought to SALG’s attention.

- If you have any similar experiences we would like to hear from you by email at SALG@rcoa.ac.uk.

- Please remember to report all equipment incidents to the MHRA.
On the SALG Agenda

Intravenous Paracetamol

- SALG have recently published a Safety Notification prompted by incidents reported to the NRLS.

- Please read the guidance and share with your colleagues.

**SALG RECOMMENDATIONS**

1. Intravenous (IV) paracetamol should be prescribed carefully, according to the weight, age and co-morbidities of the patient. The upper dose limit for each single dose and in each 24-hour period should not be exceeded.

2. 50ml vials of IV paracetamol should be used for patients less than 33kg. In infants and small children, doses should be measured accurately using a syringe.

3. Enquiry about recent paracetamol ingestion should form part of routine pre-operative assessment. All doses of paracetamol administered in the operating theatre should be recorded on the ward drug administration chart and in the anaesthetic record.
1. Intravenous (IV) paracetamol should be prescribed carefully, according to the weight, age and co-morbidities of the patient. The upper dose limit for each single dose and in each 24-hour period should not be exceeded.

2. 50ml vials of IV paracetamol should be used for patients less than 33kg. In infants and small children, doses should be measured accurately using a syringe.

3. Enquiry about recent paracetamol ingestion should form part of routine pre-operative assessment. All doses of paracetamol administered in the operating theatre should be recorded on the ward drug administration chart and in the anaesthetic record.
On the SALG Agenda

Paracetamol recommendations

4. Advice should be sought from the local poisons information service in all cases of overdose of intravenous paracetamol. Treatment with acetylcysteine is suggested following a single dose greater than 60mg/kg.

5. Intravenous paracetamol (Perfalgan®) remains under intensive monitoring by the MHRA. All suspected adverse reactions to IV paracetamol should be reported to the Yellow Card Scheme and discussed with the local poisons information service.
More on Awareness

The 5th National Audit Project (NAP5) aims to:

- find out how many patients suffer accidental awareness during general anaesthesia (AAGA)
- identify common factors
- formulate strategies to prevent this from occurring

NAP5 completed data collection in June 2013 and publication of results is expected later in the year.
More on Awareness

Incident report

“An elderly woman for total knee replacement ASA II...general anaesthetic performed by the consultant anaesthetist...LMA sited. Atracurium given to facilitate ventilation and transferred into theatre. The patient was ventilated with oxygen and air. In theatre the WHO checklist was performed, the consultant anaesthetist stated that antibiotics were given and the patient’s leg was exsanguinated and tourniquet inflated. There was a change of ODA during this time. Surgery commenced with bleeding from the wound, blood pressure 190/90 and heart rate 90. The consultant anaesthetist noticed movement...noted that no volatile turned on...”
More on Awareness

Incident report

“Patient was put to sleep in the anaesthetic room. Patient entered theatre and surgery began. The surgeon had two students alongside him. Halfway through the surgery the anaesthetist brought to our attention that the sevofluorane was switched off on her machine...When the patient came round he stated that he was aware of everything going on during his surgery...said he could feel what was happening to him and he could hear the surgeon and his students...”
More on Awareness

Recommendations

Consider implementing specific policies within the departments to prevent AAGA, including:

• setting alarm limits for low end-tidal anaesthetic concentrations, particularly where neuromuscular blocking agents have been used

• use of an EEG-based monitor for patients in certain situations (see NICE guidance).
Thromboembolic prophylaxis and neurosurgery

The use of pharmacological venous thromboembolism (VTE) prophylaxis in neurosurgical patients is controversial, and requires a balance between the risk of VTE and the risk of intracranial haemorrhage.

Incident report

“Prescription and administration of clexane to a patient only 2 hours after neurosurgery.”
Thromboembolic prophylaxis and neurosurgery

Consider the following (NICE Guidance 2010)

- mechanical VTE prophylaxis e.g. anti-embolism stockings, foot impulse devices, intermittent pneumatic compression devices

- Pharmacological VTE prophylaxis e.g. low molecular weight heparin or low dose unfractionated heparin for patients with renal failure, for patients with low risk of bleeding

- pharmacological VTE prophylaxis should not be offered to patients with ruptured cranial or spinal vascular malformations, or acute traumatic or non-traumatic haemorrhage until the lesion has been secured or the condition is stable.
NG tube placement
Are you 100% sure?

The NPSA recorded 21 deaths and 79 cases of harm associated with feeding into the lungs between 2005 and 2011.
NG tube placement – Incident report

“Patient was being cared for on ITU and had a nasogastric feed in progress at 25mls/hr when we took over his care for the night shift. The nasogastric tube had been aspirated to check position and tolerance of feed, there was no aspirate at 22.00 and 5mls at 2.00hrs. During the night we performed a chest X-ray to check the position of a new line. On reviewing the CXR the nasogastric tube looks as if it is in the right lung...”
NG tube placement
Are you 100% sure?

NPSA recommendations

• First line method: test pH of NG aspirate. pH should be 1 – 5

• Second line method: X-ray screening

• Additional method: observation and recording of the external length of NG tube (should not be used as sole testing method).

• Harm due to misplaced NG tubes is defined as a ‘Never Event’
High quality care in the NHS; making sure we do the right thing

- NCEPOD ‘Knowing the Risk’
  [link](http://www.ncepod.org.uk/2011poc.htm)

- NHS England ‘Quality in the new health system’

- ‘The Francis Report’
  [link](http://www.midstaffsinquiry.com/pressrelease.html)

- The Health Foundation ‘Measurement and Monitoring of Safety’
  [link](http://www.health.org.uk/publications/the-measurement-and-monitoring-of-safety/)
High quality care in the NHS; making sure we do the right thing

Responses to the Francis Report

RCoA

AAGBI response
http://www.aagbi.org/sites/default/files/AAGBI%20responds%20to%20the%20Francis_Report_2.pdf
High quality care in the NHS; making sure we do the right thing

Incident Report

“Patient (elderly) was returned to the ward post-operatively from recovery....The patient had a temperature of 35 and was hypoxic and hypotensive. Only one temperature had been done on arrival to recovery of 35.2 and this had not been repeated... patient subsequently became more unwell and is unlikely to survive.”
High quality care in the NHS; making sure we do the right thing

“Polytrauma patient was admitted originally to A&E, then transferred to the specialist centre for spinal fixation, then transferred to (another hospital) ICU due to lack of beds at specialist centre. During the course of the day, two days later, her clinical condition deteriorated with increasing oxygen and vasopressor requirements. On log rolling in the afternoon, the staff nurse noticed a large and deep offensive smelling scalp laceration, which had not been documented or treated...”
What was reported
- 3,807 anaesthesia related incidents were reported

eForm
- 31 incidents were reported using the anaesthetic eForm
- 12 of these were reported as ‘near miss’
- 19 incidents reported via the eForm were reported to the NPSA within 1 day

Local risk management systems
- 3,776 incidents were reported using local risk management systems (LRMS)
- 38% of these were reported as ‘near miss’
- 52% of incidents were reported via LRMS to the NPSA within 30 days
DEGREE OF HARM (ACTUAL INCIDENTS)

Figure 1 shows the degree of harm incurred by patients within the anaesthetic specialty during the period 1 January 2013 and 31 March 2013. All ten deaths were reported through LRMS.

![Bar Chart]

- No harm: 2,550
- Low: 998
- Moderate: 232
- Severe: 17
- Death: 10

Number of reports

Degree of harm

<table>
<thead>
<tr>
<th>Degree of harm</th>
<th>Number of reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>No harm</td>
<td>2,550</td>
</tr>
<tr>
<td>Low</td>
<td>998</td>
</tr>
<tr>
<td>Moderate</td>
<td>232</td>
</tr>
<tr>
<td>Severe</td>
<td>17</td>
</tr>
<tr>
<td>Death</td>
<td>10</td>
</tr>
</tbody>
</table>
Figure 2 shows the type of incidents that occurred within the anaesthetic specialty that were reported using LRMS or the anaesthetic eForm for the period 1 January 2013 and 31 March 2013. The categories were determined at local level.
Please report incidents so they can be used for learning

• Use your local system

Or

• Use the anaesthesia eForm https://www.eforms.npsa.nhs.uk/asbreport