

We conducted Audit of anaesthetic records before and after introduction of EPR with AAGBI record keeping guidelines as the standard.

The aim was to compare informations recorded using the scanned-in anaesthetic paper chart on the trust electronic system and new EPR.

**Methods** 60 patients records, who had undergone anaesthesia at the Trust, were randomly selected for each audit in May and December 2021.

We analysed anaesthetic charts availability, patients details, name of clinicians involved, drugs administered, details of airway management, how well observations were recorded, overall legibility of records and completion of recovery handover.

**Results** We found significant overall improvement in record keeping after the introduction of the EPR.

100% EPR charts available Vs 80% scanned-in paper charts, vital observations 100% vs 90%, airway management 100% vs 76%, anaesthetist name 100% vs 95%, overall legibility 100% vs 90%, documented recovery handover 100% vs 80%.

**Conclusions** Our EPR satisfies the current AAGBI guidelines recommending “*automated electronic anaesthetic record systems, with an accurate summary of information provided by all monitoring devices*”.

EPR pre-populates anaesthetic procedures, it's time efficient as it automatically uploads key information of patient, surgery details and clinicians involved. Drug names and doses administered are recorded easily. This minimises documentations errors producing highly legible, good quality document. Automatic digital interface between observation monitor and computer allows instantaneous recording of observation

#### B146 AN ARGUMENT FOR THE POTENTIAL OF A VETERINARY TOPICAL ANALGESIC PRODUCT (TRI-SOLFEN) FOR HUMAN USE

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10.1136/rapm-2022-ESRA.221

**Background and Aims** In the veterinary market a product called Tri-Solfen has been available for many years which allows for topical anaesthesia for animals with painful wounds. This product contains a mixture of short acting (lidocaine) and long acting (bupivacaine) local anaesthetics together with adrenaline (to reduce bleeding) and cetrimide (a common antimicrobial agent, found in ‘Savlon’). This product is designed to ‘spray and stay’ ie stick to the wound once sprayed on. Only a little product is therefore required to give good pain relief. Patent issues have put off investors from funding studies into the potential human uses of this very successful veterinary product.

**Methods** Medical Ethics are working on bringing this concept of a sprayable topical anaesthetic to the human market. If the early trials are successful, it is envisaged that the use of this product could rapidly allow for safe pain relief in large numbers of casualties with blast-related burn injury, or at least have an opiate-sparing action.

**Results** Currently first-in-man trials are undergoing looking at ensuring that toxic levels of local anaesthetic do not develop in the blood stream. There are also other potential benefits from the early application of an antimicrobial agent such as cetrimide, which has yet to be studied.

**Conclusions** We aim to describe where we are currently with our research strategy, and look for other partners who are willing to help us bring this potentially extremely useful product for use either in the clinic, the burns unit, the battlefield or following a terrorist incident.

#### B147 COMPARATIVE EFFECTIVENESS OF ORAL VERSUS INTRAVENOUS TRANEXAMIC ACID IN PRIMARY TOTAL HIP AND KNEE ARTHROPLASTY

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10.1136/rapm-2022-ESRA.222

**Background and Aims** The use of tranexamic acid (TXA) has reduced rates of perioperative blood transfusion for total hip arthroplasty (THA) and total knee arthroplasty (TKA)<sup>1</sup>. While oral rather than intravenous (IV) dosing of TXA at the time of surgery may simplify perioperative protocols and reduce costs, it is not clear whether oral TXA is as effective as IV TXA in reducing blood loss and transfusion rates.

**Methods** This randomized controlled trial compared the use of one preoperative dose of oral TXA (1,950mg) to one preoperative dose of IV TXA (1,000mg) in THA (N=200) and TKA (N=200). Consecutive patients undergoing primary THA or TKA under regional anesthesia with sedation were enrolled. The primary outcome was calculated blood loss (CBL). Secondary outcomes were transfusions and complications, including cardiac events and venous thromboembolism. The study was designed as a non-inferiority trial with an intention-to-treat analysis.

**Results** Oral TXA was non-inferior to IV TXA (p<0.001). Mean CBL values were 842.21 mL versus 860.45 mL for THA and 798.48 mL versus 878.13 mL for TKA in the oral and IV arms, respectively. There was one postoperative transfusion, which occurred in the IV TXA arm of the study. There was no difference in complication rates between the two arms of the study.

**Conclusions** Oral TXA can be feasibly administered in the pre-operative setting prior to THA or TKA and is non-inferior to IV TXA with respect to CBL and transfusion rates in this setting.

#### B148 EFFECT OF PORTABLE NEGATIVE PRESSURE UNITS ON EXPELLED AEROSOLS IN THE OPERATING ROOM ENVIRONMENT

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10.1136/rapm-2022-ESRA.223

**Background and Aims** Spontaneously breathing patients undergoing procedures under regional anesthesia can expose operating room personnel to infectious agents. The use of localized