



ANAESTHETISTS ROLE IN PREVENTION OF POSTOPERATIVE INFECTION

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OUTLINE

Evidence based strategies for prevention

My issues in antibiotic prophylaxis

Developing a guideline

Future developments

HOW DO ANAESTHETIST PREVENT INFECTION

The Perioperative Care of the Patient

Pre-operatively

Intra-operatively

Post-operatively

EVOLVING EVIDENCE

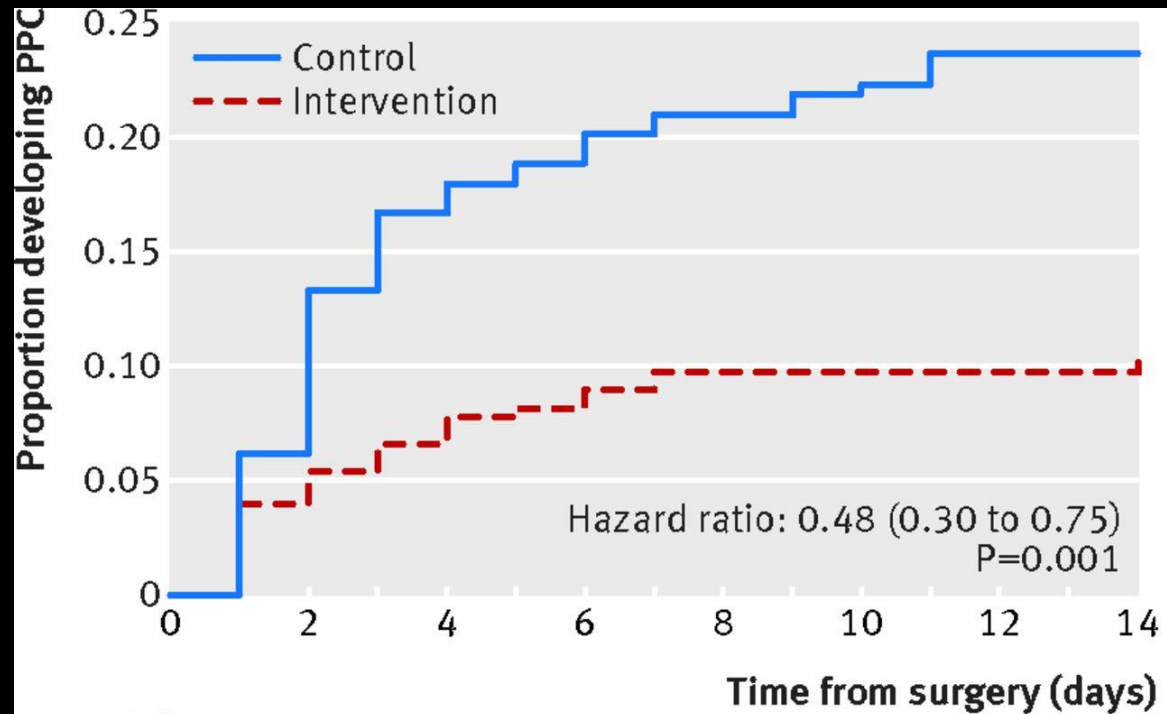
Restrictive versus Liberal Fluid Therapy for Major Abdominal Surgery



PADDI Trial

Perioperative ADministration of Dexamethasone and Infection

PREHABILITATION




No at risk	
Control	
214	198 172 167 162 160 156 156
Intervention	
218	207 200 196 192 192 192 192

30 minutes of physiotherapy education and breathing exercise coaching

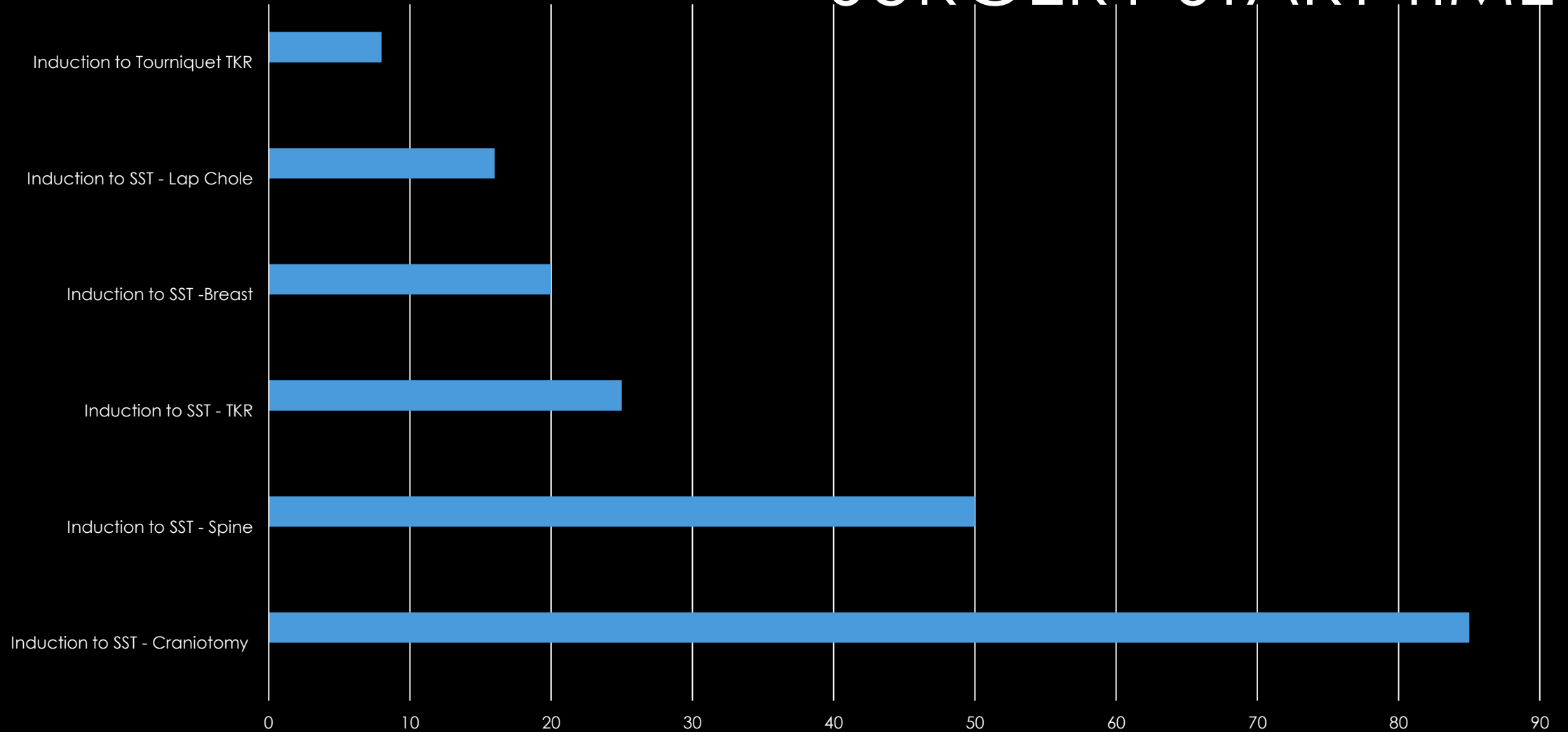
Halved Pulmonary Complications

BMJ 2018; 360 doi: <https://doi.org/10.1136/bmj.i5916>

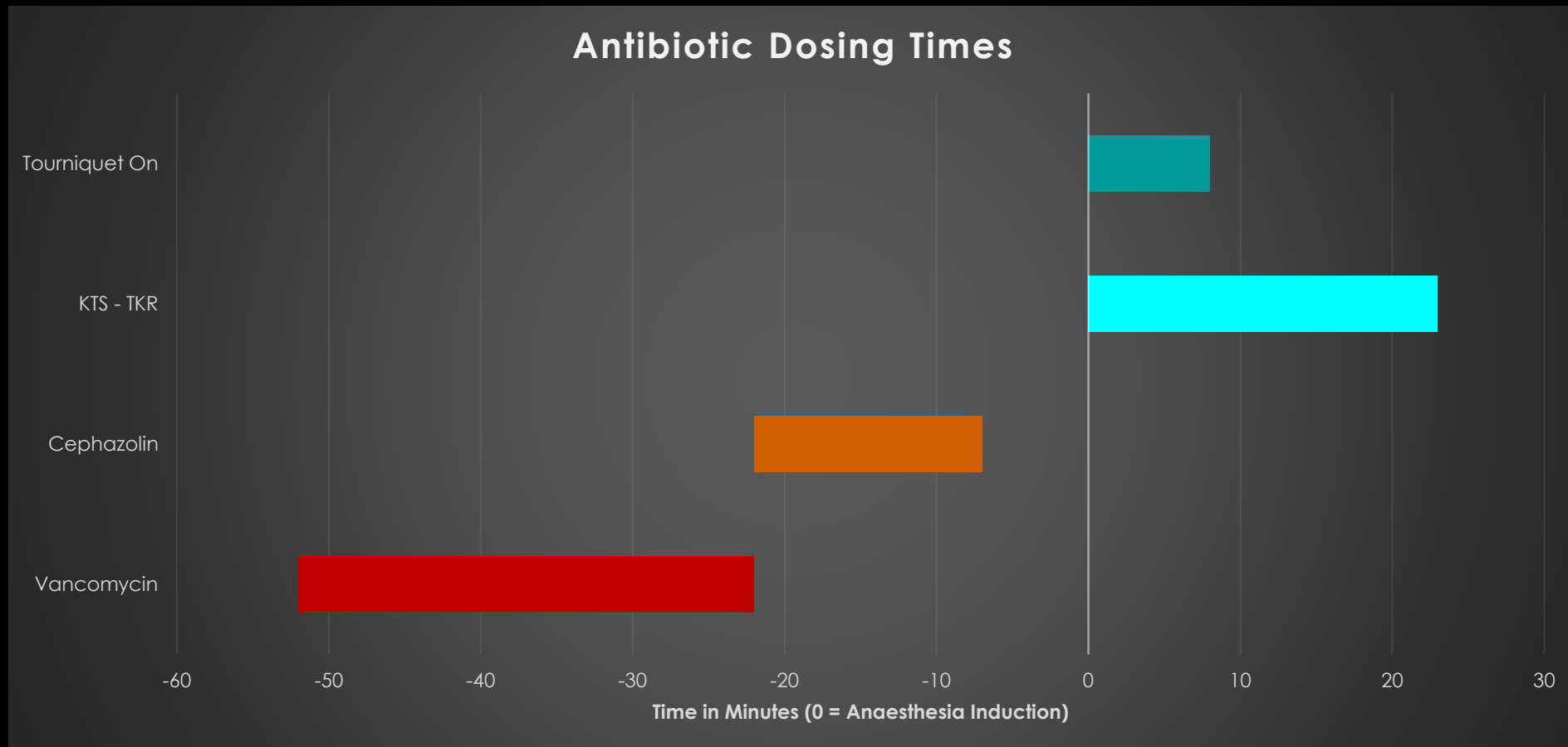


FOR EFFECTIVE PROPHYLAXIS
THE MIC OF THE ANTIBIOTIC AGENT AT **TISSUE
LEVEL** MUST BE EXCEEDED FOR AT LEAST THE
PERIOD FROM INCISION TO WOUND CLOSURE

INDUCTION OF ANAESTHESIA & SURGERY START TIME



ITS IN THE TIME OUT? RIGHT?



Anaesthesia, Surgery, and Life-Threatening Allergic Reactions

Anaphylaxis in the operating theatre is a life-threatening drug reaction that happens suddenly. It is a severe allergic reaction that can be fatal. It is caused by a severe allergic reaction to a drug or other substance. It is a medical emergency and requires immediate treatment.

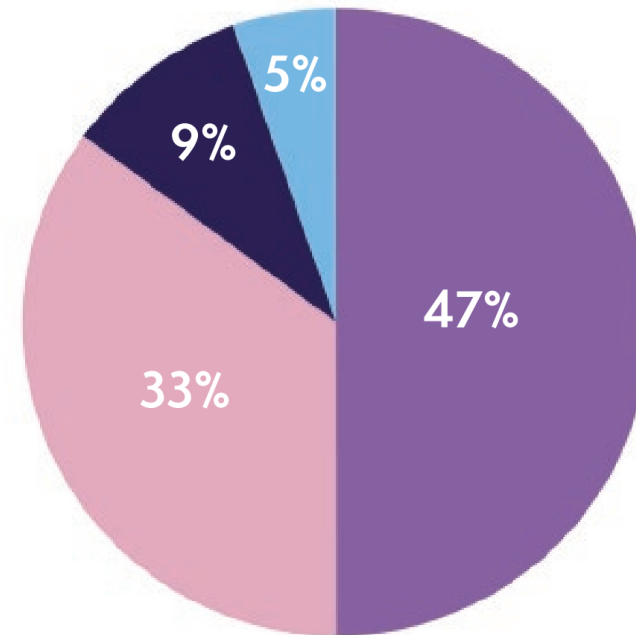
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Antibiotics

were the **most common trigger** for anaphylaxis.

The commonest triggers were

- Antibiotics (**47%**)
- Muscle relaxants (**33%**)
- Chlorhexidine (**9%**)
- Patent Blue dye (**5%**) used in some breast surgery





The **incidence of perioperative anaphylaxis** was
1 in 10,000 anaesthetics



Teicoplanin is **17-fold**
more likely to cause
anaphylaxis than alternatives

AUDITING SURGICAL ANTIBIOTIC PROPHYLAXIS

- WHY?
- DRUG CHOICE
- DRUG DOSE
- REPEAT DOSING
- ASSESSING TIMING IS DIFFICULT

TIME	09 ⁰⁰	10 ⁰⁰
AIR/N ₂ O/O ₂ FLOWS		
VOLATILE AGENT %		
SAO ₂		
ETCO ₂		
FiO ₂		
Temp		
DRUGS		
Midazolam	2	
Fentanyl	150	
Propofol	120	
Rocuronium	50	
Cephazolin		2g

MY EXPERIENCE IN DEVELOPING A GUIDELINE

CONCORD HOSPITAL

ADD
OBSTETRICS
TAKEAWAY
EXCESS

CANTERBURY HOSPITAL

WHERE NEXT

Guidelines – I am happy to share
Champions
Engage Clinician Stakeholders
Support Auditing

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