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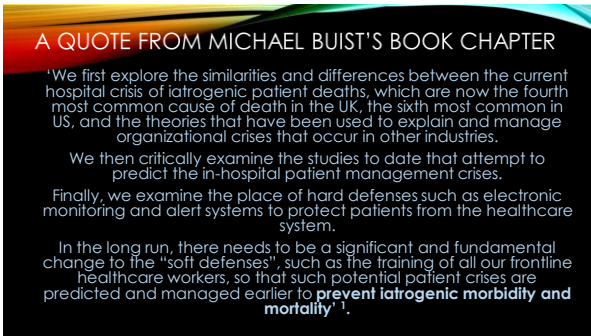
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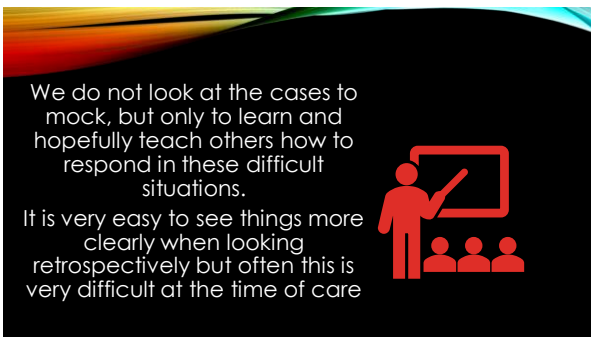
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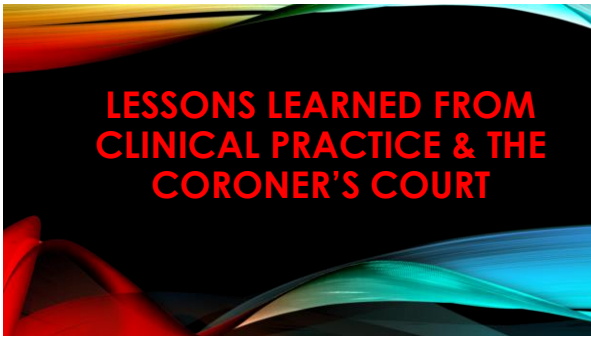
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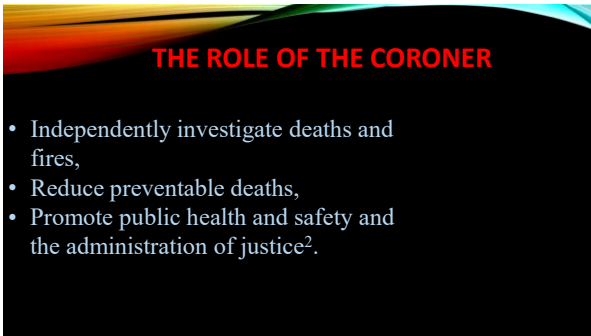
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**THEMES IN MEDICAL MATTERS**

- Poor flow of information
  - within hospitals
  - between hospitals and other institutions
- Poor communication:
  - between healthcare workers
  - or with families
- Failure to recognise & treat departures from a 'normal' clinical course
- Failure to escalate<sup>3</sup>

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How important is it to time and run intravenous lines accurately?

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**CASE HISTORY<sup>3</sup>**

- A patient gave birth at 20.37 hrs
- Third stage of labour was incomplete
- Taken to theatre for manual removal of placenta
- The patient arrested at 10.27 hrs in the operating suite
- Resuscitated for 40 mins then spontaneous return of circulation
- Large blood loss was noticed
- Hysterectomy followed by transfer to ICU
- Irreversible brain injury – Rx withdrawn
- The patient died shortly after

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**CORONIAL INVESTIGATION**

- Cause of death – hypoxic brain injury complicating cardio-respiratory arrest during manual removal of placenta (under spinal anaesthetic) following postpartum haemorrhage

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**ISSUES AT INQUEST INCLUDED;**

- Observations in birthing suites prior to transfer to theatre for manual removal of placenta<sup>3</sup>
- Questions arose around the amount of blood lost and how blood loss was measured<sup>3</sup>
- Whether fluid resuscitation was appropriately administered<sup>3</sup>

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**THIS CASE WAS COMPLICATED BY<sup>3</sup>;**

- Lack of documentation of blood loss
- Lack of certainty re blood loss (estimates)
- Lack of documentation regarding fluid resuscitation
- Inquest was held years after the event
- Clinicians unable to recall
- Especially important as the deceased’s family submitted that Ms M died as a result of unrecognised post-partum haemorrhage<sup>3</sup>

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### CORONERS FINDINGS

- Cause of death was amended to include 'in the presence of a patent foramen ovale'<sup>3</sup>

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### NURSING LESSONS LEARNED

- Accurate fluid balance monitoring (even if you put bags aside and fill out later)
- Accurate assessment of blood loss and have a calculation/method of how this was achieved
- Accurate documentation
- Discussion

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**How good is your aseptic technique?**  
**Can uncontrollable pain suggest something serious?**

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### CASE HISTORY

#### Case History 3<sup>4</sup>

- A 28-year-old female who was generally healthy and lived with her parents
- With the intent of having liposuction, she saw a general practitioner who routinely performed cosmetic surgery in a private clinic
- During her preliminary consultation, the patient did not divulge the details of her usual family doctor, thus preventing any pre-operative discussions between the two doctors or any post-operative correspondence

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### CASE HISTORY

- The liposuction was booked and performed on a Wednesday under sedation, and she was discharged home immediately afterwards
- The plan for routine follow-up was by way of a phone call from the clinic the next day
- The procedure had involved five small incisions in the abdominal region and on the front and rear sides of both thighs
- She was prescribed paracetamol and Di-Gesic Tablets and Temazepam

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### CASE HISTORY

- That night of the surgery and the following day, she looked unwell and complained to her parents that she was sore
- She remained in bed much of the time and shuffled in pain when she attempted to walk
- On the Friday, she phoned her doctor on two separate occasions
- He arranged for a script for Panadeine Forte to be made available at a local pharmacy which her father then collected for her

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### CASE HISTORY

- Both parents noted that she was in greater pain than the previous day
- She told her parents the Dr told her to remove her compression garment (usually worn for six weeks) because of a significant amount of pain
- The next morning (Saturday), her mother found her in bed looking yellow and groggy
- She subsequently died<sup>4</sup>

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### CORONIAL INVESTIGATION

- The coroner examined a number of issues at inquest including whether proper and adequate post-operative advice and care had been provided to the patient, and whether more timely provision of medical and surgical care may have prevented her death<sup>4</sup>
- The coroner also looked at the doctors operating procedures and theatre with respect to the clostridium infection<sup>4</sup>

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### CORONIAL INVESTIGATION

- The Dr's qualifications and experience in performing a liposuction procedure were accepted by the coroner<sup>4</sup>
- His method of sterilizing the skin (particularly in the ano-genital region), products used, and suturing practices were explored<sup>4</sup>

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### CASE HISTORY

- A medical specialist from the Department of Health was called as an expert to report the findings of a site investigation of the Dr's clinic
- The expert had identified a number of areas of concern
  - the operating room was small and crowded,
  - the air reticulation system was unsafe,
- the sterilization techniques used by the Dr may have been defective<sup>4</sup>

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### CASE HISTORY

- Random samples of instruments from the Dr's clinic were sent away for testing
- Results showed that all instruments that should have been sterile, were found to be so<sup>4</sup>

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### CORONIAL RECOMMENDATIONS

- The coroner endorsed the recommendations made in a 2010 report from the Inter-Jurisdictional Cosmetic Surgery Working Group (established by the Australian Health Ministers' Advisory Council)
- Two further recommendations were added: 1) that the cosmetic surgery industry adopts an acceptable level of care that must include a post-operative review in person within the first 24-48 hours of a liposuction procedure; and 2) that the Health Department formulate and disseminate treatment guidelines for gas gangrene<sup>4</sup>

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### PERIOPERATIVE LESSONS LEARNED

- Post-operative orders
- Increasing pain or unresolved pain post-operatively should ring alarm bells in PACU
- Issue with infection prevention – the investigations into the sterility of all instruments and equipment would have been exhaustive!
- Remember the Propofol incident in 2014 with the Proteobacteria *Ralstonia*
- The number of people in a theatre re infection prevention

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**Do you really need  
monitoring at the start of  
anaesthesia in a healthy  
young patient who is having  
a quick procedure?**

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### CASE HISTORY<sup>3</sup>

- A Patient presented for elective termination of pregnancy at 21 weeks at a day procedure clinic (with no emergency/ICU facilities)
- Two Physicians were involved in the procedure
- From the outset of the investigation, there appeared to have been an issue with the function of the patient monitoring equipment in theatre
- Surgery proceeded with the patient apparently being in part manually observed

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### CASE HISTORY<sup>3</sup>

- The patient arrested intraoperatively
- Medical staff commenced resuscitation
- Return of circulation with inotropes was achieved (not sure of down time)
- Transferred to another Hospital Emergency Department and then to Intensive Care
- The patient was then found to have extensive cerebral oedema consistent with a hypoxic brain injury
- She died 4 days later

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### CORONIAL INVESTIGATION

- Cause of death was unascertained, although anatomical findings of global cerebral ischaemia were noted<sup>3</sup>

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### CORONERS FINDINGS

- Appropriateness of continuing with the procedure in the absence of a **workable** pulse oximeter
- Adequacy of the documentation during the procedure
- Qualifications of the medical and nursing staff<sup>3</sup>

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**PERIOPERATIVE LESSONS  
LEARNED**

- Ensure accurate monitoring – pulse oximetry – nail polish!!!
- Accurate documentation in an arrest (start of hypoxia) – down time

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**REFERENCES**

1. Buist, M. (2011). The Challenge of Predicting In-Hospital Cardiac Arrests and Deaths. In: DeVita, M., Hillman, K., Bellomo, R. (eds) Textbook of Rapid Response Systems. Springer, New York, NY.
2. The Coroners Court of Victoria.  
<https://www.coronerscourt.vic.gov.au/about-us>
3. English, C 2015, 'Australian Society of Anaesthesia and Post-Anaesthesia Nurses', in Australian Society of Anaesthesia and Post-Anaesthesia Nurses, Melbourne.
3. Victorian Institute of Forensic Medicine 2016, 'Post-operative pain- when to worry', Clinical Communique, vol. 3, no. 1.

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