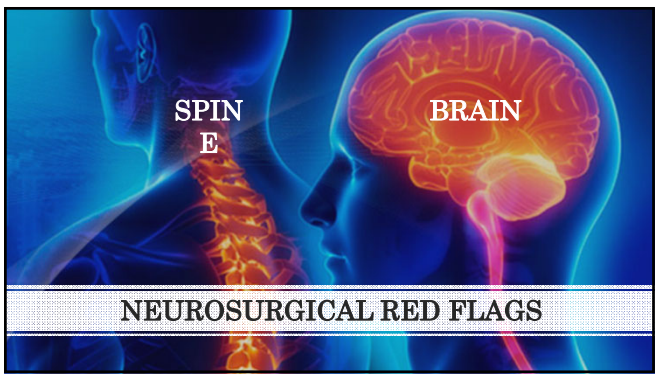
OVERVIEW OF LECTURE

1. **Red Flags**
   - Lower Back Pain
   - Neck Pain
   - Headaches
2. **Referrals**
   - Surgical Information
   - Medical Information
   - Referral Process
3. **Preassessment**
   - Surgical
   - Medical
4. **Operative**
   - Anaesthetic
   - Surgical
5. **Postoperative**
   - Immediate
   - Traditional Rehabilitation
   - Chiropractic
6. **Observations**
   - Perceptions
   - Enlightenments



Are chiropractors different from other allied or alternative health care practitioners

The concept of recognition and management of **red flags**

The concept of recognising and management of the diagnosis not just the symptoms

- What are the symptoms?
- What are the diagnosis?
- What is the natural history?
- What is the management to alleviate the symptoms and/or to improve the natural history?
- Am I qualified and possessing the skills to provide those management?
- **When do I seek help?**

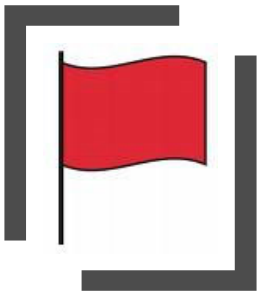
Common referral to Chiropractors

Back and Neck Pain

- Common
  - Lifetime prevalence: 80%
  - Annual incidence 15-20%%
- Significant Impact
  - Adversely affect QOL
  - 1-2% GDP
  - 1% work force on sick leave per day
  - No 2 reason for long term sick leave

Assessment and Treatment

- "Simple"
  - Majority
    - Neurogenic <5%
    - Mechanical >90%
- "Serious"
  - <2%
  - "RED FLAGS"

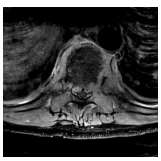


Assessment and Treatment

1. Exclude **Red Flags**
2. Looking for clues of the pain generator
3. Management
   - Acute to subacute <6 – 12 weeks
   - Chronic >6 – 12 weeks

Red Flags

- Rare but Serious, Needs Urgent Attention
- Suspicion mainly from history

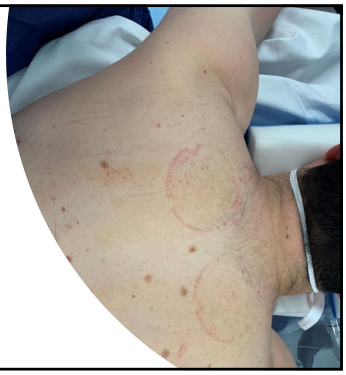


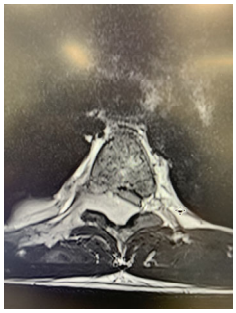
Red Flag 1: Tumour

- Past history of malignancy
- Unexplained weight loss
- Significant nocturnal/rest pain

Case History

- Young man in 30s
- Upper back pain
- Nocturnal, unrelenting
- Sweats
- Numbing in trunks and legs
- Treated with physical therapy and cupping



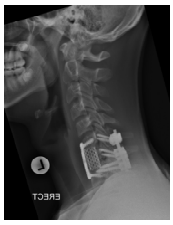


Red Flag 2: Infection

- History of diabetes, immunosuppression, IVDU
- Fever, rigors, sweats
- Recent history of UTI, spine intervention

Red Flag 3: Fracture

- Elderly
- Postmenopausal female
- Chronic steroids use
- Osteoporosis
- Ankylosing spondylitis, DISH
- Recent trauma



Lucky missed

Red Flag 4: Significant Neurological Deficit

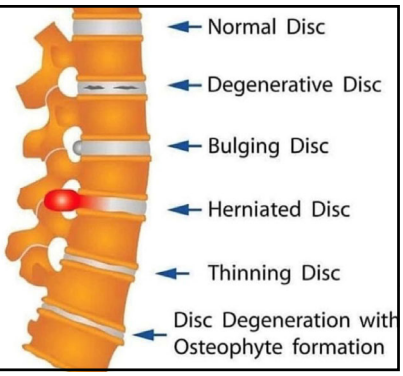
- Cauda equina syndrome
- Cervical myelopathy
- "Foot drop"

If presence of Red Flags

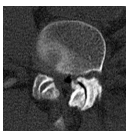
- Investigate if necessary
- Urgent referral to a specialist

Back pain

Its so much more than just the spine.

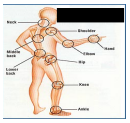


Facet joint pain



Discogenic pain

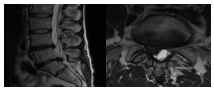
Peripheral Joint



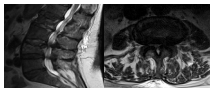
Myofascial pain

Mechanical Back Pain

Neurogenic Pain

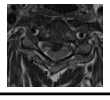


Radicular pain



Neurogenic claudication

Cervical disc prolapse with nerve root compression

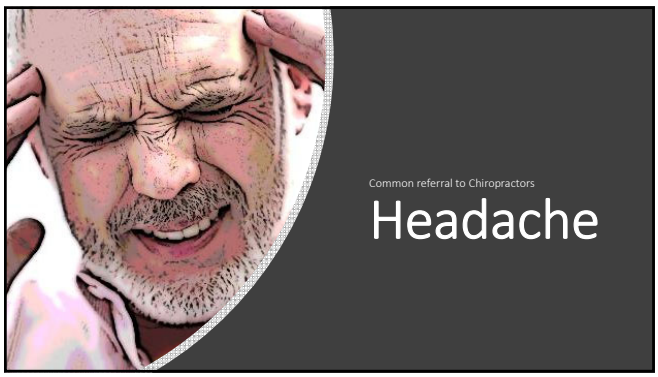


Cervical disc prolapse with spinal cord compression

Simple back pain

Manage them if you are comfortable

Refer if indicated



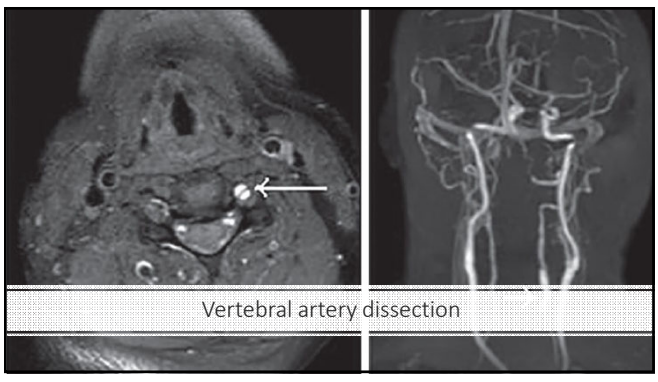
Common referral to Chiropractors

Headache

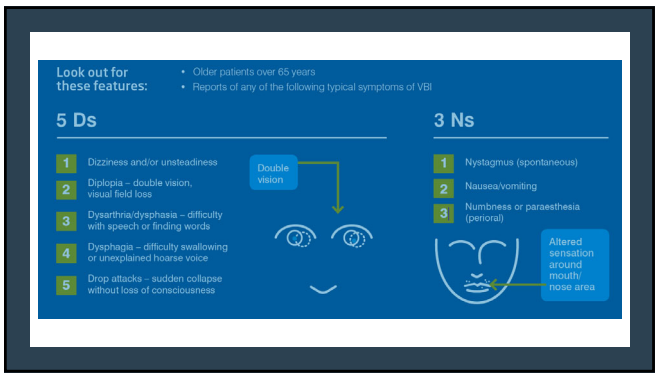
Headache Red Flags

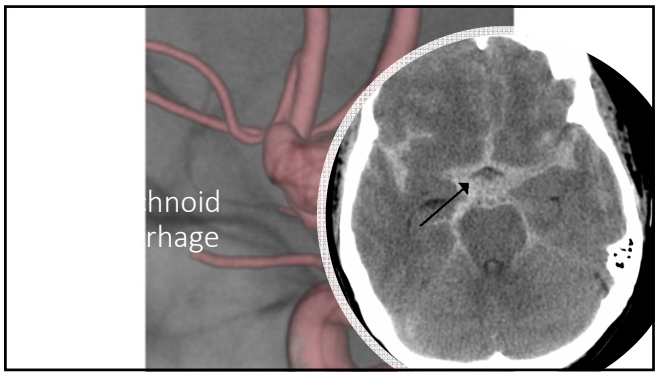
SSNOOP4

S	Systemic Symptoms	Fever, weight loss, fatigue	Infection, inflammation, metastatic cancer, meningitis
S	Secondary risk factors	HIV, cancer, immunosuppression	Infection, inflammation, metastatic cancer, meningitis
N	Neurological signs	Altered GCS, focal deficits	Encephalitis, mass lesion, stroke
O	Onset	Thunderclap, abrupt	SAH, IPH, RCVS
O	Older	New > 50years old	Temporal arteritis
P	Positional	Change with posture or neck position	Intracranial hypertension, Post fossa pathology, dysautonomia cervicogenic headache
P	Papilloedema	Visual disturbance	
P	Previous Headache History	Change in quality	
P	Precipitated by Valsalva		

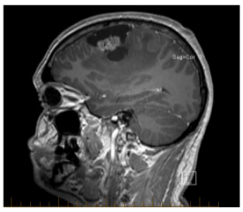


Vertebral artery dissection





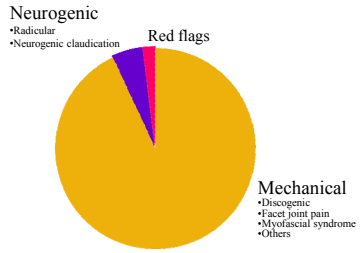
Brain tumour



MRI on presentation

Post-operative MRI

Pain Generators



When do you refer simple back/neck pain

- Suspicious of Red Flags
- Refractory pain **>6-8 weeks**
- Progressive pain
- Progressive neurological deficits

Surgical information required

What information do I need from the referrers

- PATIENT'S DETAILS AND CONTACT
- SYMPTOMS AND/OR DIAGNOSIS
- ANY CONCERNING FEATURES
- ANY IMAGING STUDIES

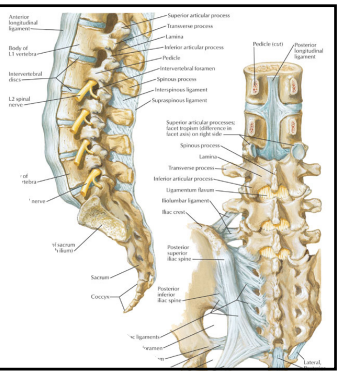
Medical information required

- **Allergies**
- **Current medications**
- Past medical history
- Occupation
- Significant family medical history
- Smoking history
- Other relevant details

It's a real bonus if the patients weight and height is included

Aims of consultation

1. Exclude Red Flags
2. Looking for clues of the **pain generator**
3. Management
   - <6-8 weeks
   - >6-8 weeks



Clues of pain generator: History

- Quality of the pain
  - Site
  - Nature
  - Severity
  - Exacerbating & relieving factors
- Circumstances
  - Onset
  - Duration
  - Pain pattern: 24 hours, since onset
- Management
  - Previous episodes, past management
  - Current treatment & medication

Clues of pain generator: Examination

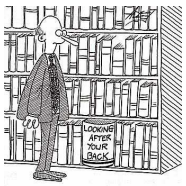
- Inspection & palpation
- Range of motion
- Gait
- Special tests:
  - Spurling's test
  - SLR, FABER, Waddell
- Neurological examination
  - Tone, power, reflex, sensation
- Peripheral pulses

My Management in acute pain < 6 -12 weeks

1. Education
2. Advice
3. Physical therapy
4. Investigation is NOT necessary
5. Pharmacotherapy

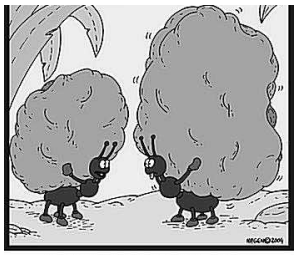
Education

- Explanation
- Positive reassurance
- Proper posture, sleeping positions, lifting techniques



Staying Active

- Bed rest should be limited
- Temporary activity modification, progressive return to normal activity/work



I hurt my back last week, so I've been put on "Ligtht Duty" for a couple of weeks...

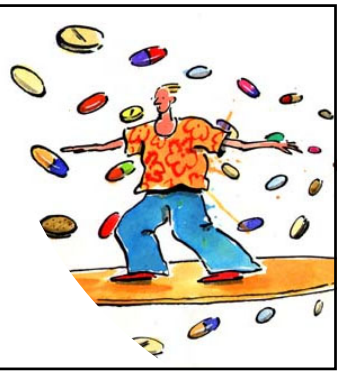
Exercise

Initially, low stress aerobic exercise

Longer term, core muscle exercise, back conditioning, pilates

Pharmacotherapy

- Is the pain under controlled?
  - Paracetamol +/- weak opioids
  - NSAIDs
  - Muscle relaxants
  - Amitriptyline
  - Membrane stabilising agents
  - Steroids/cortisone injection



Management of neck and back pain > 6 - 12 weeks

Education

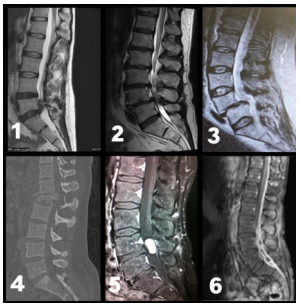
Target specific diagnosis, investigation and management

Surgery vs continued conservative treatment

- SPORT trial

Indications for spine surgery

1. Large herniated disc
2. Spinal stenosis
3. Spinal spondylolisthesis
4. Spinal fracture
5. Spinal tumor
6. Spinal infection/abscess



Indication for surgery in degenerative spine disease

- Red Flags
- Functionally important neurological deficits
- Significant significant pain!!!
- Refractory pain that impact on lifestyle
- " I have enough"

Positive Investigations

Key to successful spine surgery

1. Right indication and plan.

The best surgery never overcomes the wrong indication.

2. Great intraoperative team.

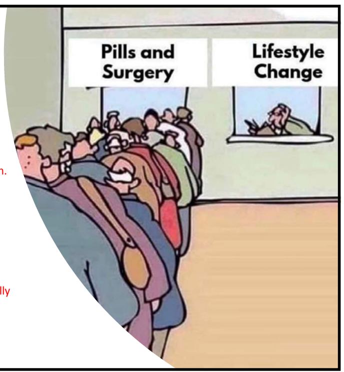
Trust & communication.

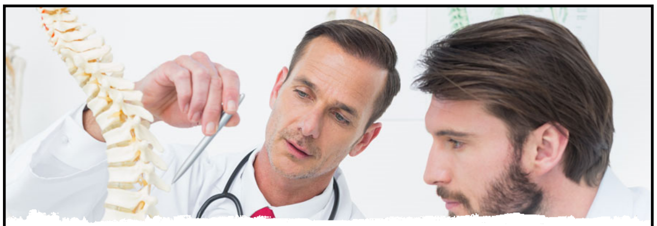
3. The right tools.

Microscope, neuro-navigation GPS

4. Patient preparedness.

Never rush until the patient is emotionally and physically ready.





What's the difference between a Chiropractor and an Anaesthetist?

The public know that Chiropractors are called Doctors.

10% of patients did not know Anaesthetists were Doctors.
17% of patients did not know we were Specialists.
30% of patients had no idea what we did.

Anaesth Intensive Care 2007; **35**:

Patients' knowledge of the qualifications and roles of anaesthetists

A. R. BRAUN*, K. LESLIE†, C. MORGAN‡, S. BUGLER§

Department of Anaesthesia and Pain Management, Royal Melbourne Hospital, Melbourne, Victoria, Australia

SUMMARY

Patients' knowledge of anaesthetists' qualifications and roles remains inaccurate despite the efforts of professional bodies worldwide. However, patients have not been surveyed on this subject in Australia for more than 20 years. We therefore surveyed 200 patients attending the pre-admission clinic prior to elective non-cardiothoracic surgery in an Australian teaching hospital to determine current knowledge. Most (90.5%) patients stated that anaesthetists are medically qualified and 83.5% stated that they are medical specialists. Younger age, an English-speaking background and previous experience with surgery predicted knowledge of anaesthetists' qualifications. Most patients believed that anaesthetists work in the operating theatre and are continually present during surgery, but few recognised their leading role in the care of patients during surgery or their other roles outside the operating theatre. Increased efforts are required to inform patients about the roles of anaesthetists in their care.

Key Words: anaesthetists, patients, survey, roles, knowledge, attitudes

In recent years, the general public has taken an increasing interest in medicine, particularly those aspects portrayed in television dramas and documentaries. At the same time, professional bodies have attempted to increase public awareness of the work undertaken by anaesthetists[1]. Despite this, patients' knowledge of the qualifications and roles of anaesthetists has been inaccurate and incomplete[1-3].

Many patients have been unaware that their anaesthetist is medically qualified, let alone a medical specialist. In surveys performed in the last 25 years, the percentage of patients who correctly identified anaesthetists as medically qualified ranged from 63 to 90%[1-10], even when the interview was conducted postoperatively[4,5] or in private practice[7]. In addition, the roles of the anaesthetist are unclear to patients, many of whom believe our work is complete after induction of anaesthesia[11]. For example, whilst 79% of patients in one study thought the anaesthetist was primarily responsible for their well-being during surgery, 30% had "no idea" when asked, "During your anaesthetic, what does the anaesthetist do?"[9]. Finally, whilst anaesthetists fulfil many roles outside the operating theatre, these roles are very rarely ascribed to anaesthetists by patients[2,8].

Patients have not been surveyed on this subject in Australia for more than 20 years[4,5]. During that time, the roles of anaesthetists have expanded enormously and professional bodies in our region have made considerable efforts to increase the profile and understanding of our speciality. The purpose of this study therefore was to assess the knowledge of anaesthetists' qualifications and the roles of the anaesthetist of patients awaiting elective surgery in an Australian teaching hospital.

METHODS

Following approval by the Human Research Ethics Committee at The Royal Melbourne Hospital, male and female patients awaiting elective, non-cardiothoracic surgery, aged 18 years and over, and presenting to The Royal Melbourne Hospital Preadmission Clinic, were approached prior to review by nursing or medical staff and asked to participate in this survey. Those with inadequate English language comprehension due a language barrier, cognitive deficit or intellectual disability were excluded.

*M.B., B.S., Registrar in Anaesthesia, Department of Anaesthesia and Pain Management.
†M.B., B.S., M.D., M.Epi., F.A.N.Z.C.A., Head of Research, Department of Anaesthesia and Pain Management and Honorary Associate Professor, Department of Pharmacology, University of Melbourne.
‡M.B., B.S., Honorary Research Fellow, Department of Anaesthesia and Pain Management.
§R.N., Research Nurse, Department of Anaesthesia and Pain Management.

Address for correspondence: A/Prof K. Leslie, Department of Anaesthesia and Pain Management, Royal Melbourne Hospital, Parkville, Vic. 3050.

Reprints will not be available from the authors.

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Anaesthesia and Intensive Care, 35, No. 4, August 2007

During an operation, your life is on our hands, But despite the highly sensitive role we play, we are all but invisible to our patients. *"The Guardian."*

Anaesthetists have an extensive knowledge of medicine and surgery and understanding of the basic sciences. They know how the body responds to anaesthesia and surgery, and how a patient's health affects these responses.

We know how to use medications (PHARMACOLOGY) to alter how the body works (PHYSIOLOGY) to achieve a desired state that allow surgery to proceed safely or stabilises a critical ill patient, as well as a structural understanding of the body (ANATOMY) so as to implement advanced practical procedures such as tracheal intubation, central line and regional blocks.

Minimum training time: 5-7 years med school + 3+ years Junior doctor + 4 years training program + 1-2 years Fellowship = **Total of 13-16+ years.**

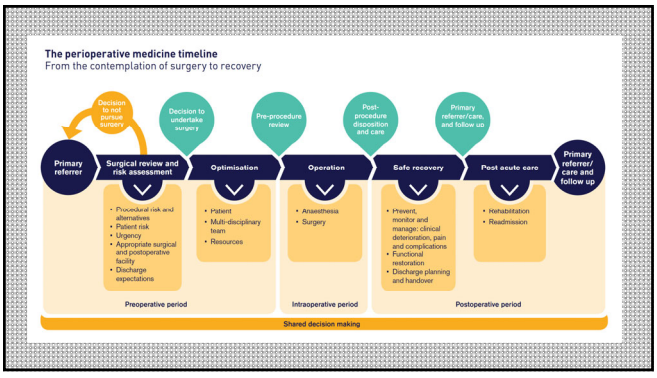
I took 18 years to become a Specialist Anaesthetist.

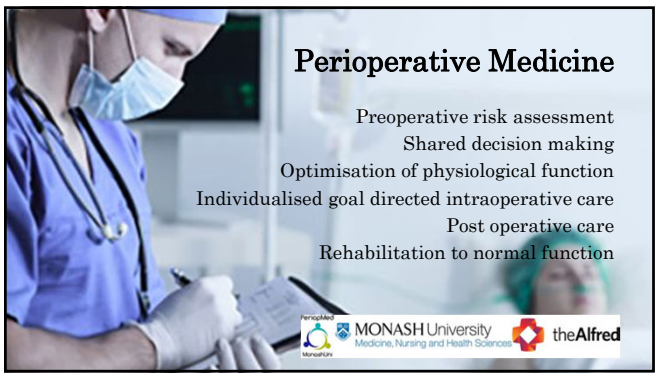
PERIOPERATIVE MEDICINE

THE PATHWAY TO BETTER SURGICAL CARE

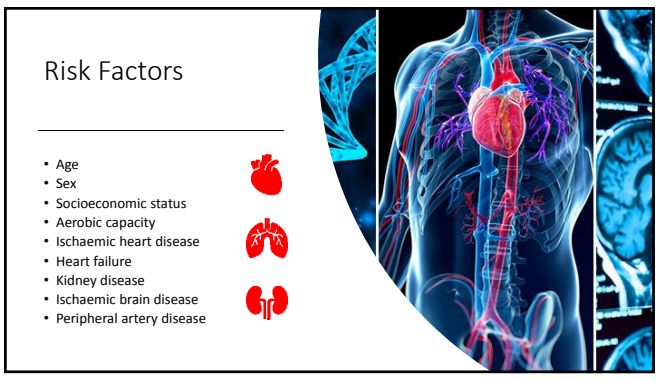
Multidisciplinary Team

- Anaesthetists
- Dietitians
- Nurses
- Pharmacists
- Physicians
- Physiotherapists
- Surgeons

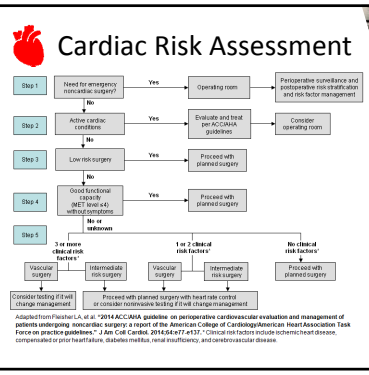


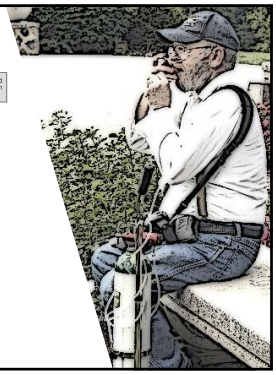

Perioperative Medicine
Preoperative risk assessment
Shared decision making
Optimisation of physiological function
Individualised goal directed intraoperative care
Post operative care
Rehabilitation to normal function
MONASH University
Medicine, Nursing and Health Sciences
theAlfred


What is a full blood count test?
It is an investigation asked for by the Anaesthesiologists to help them cancel the surgery.
ANAESTHETIC PREASSESSMENT

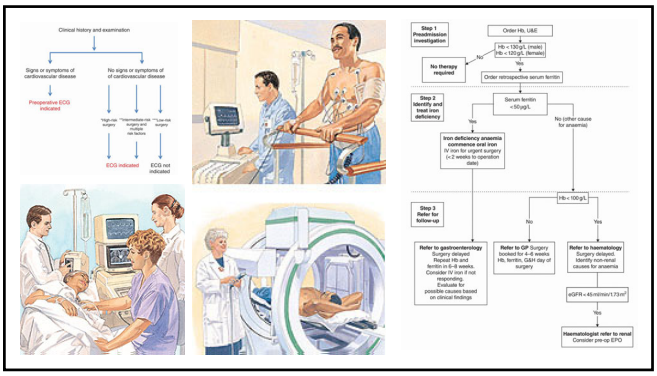

Risk Factors
Age
Sex
Socioeconomic status
Aerobic capacity
Ischaemic heart disease
Heart failure
Kidney disease
Ischaemic brain disease
Peripheral artery disease

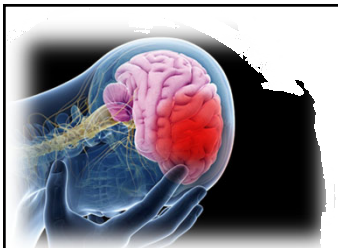
Cardiac Risk Assessment





Adapted from Fleisher LA, et al. "2014 ACC/AHA guideline on perioperative cardiovascular evaluation and management of patients undergoing noncardiac surgery: a report of the American College of Cardiology/American Heart Association Task Force on practice guidelines." J Am Coll Cardiol. 2014;64:e77-e137. * Clinical risk factors include ischemic heart disease, compensated or prior heart failure, diabetes mellitus, renal insufficiency, and cerebrovascular disease.





Stroke Risk with AF

TABLE 25.2 The $CHADS_2$ and CHA_2DS_2-VASc risk stratification scores for subjects with non-valvular AF

Source: Lip et al. [8]. Reproduced with permission from Elsevier Ltd.

Definition and scores for $CHADS_2$ and CHA_2DS_2-VASc	Score	Stroke risk stratification with the $CHADS_2$ and CHA_2DS_2-VASc scores	
			Adjusted stroke rate (% per year)
$CHADS_2$		$CHADS_2$	
Congestive heart failure	1	0	1.9%
Hypertension	1	1	2.8%
Age ≥ 75 y	1	2	4.0%
Diabetes mellitus	1	3	5.9%
Stroke/transient ischaemic attack/thromboembolism	2	4	8.5%
Maximum score	6	5	12.5%
		6	18.2%
CHA_2DS_2-VASc		CHA_2DS_2-VASc	
Congestive heart failure	1	0	0%
Hypertension	1	1	1.3%
Age ≥ 75	2	2	2.2%
Diabetes mellitus	1	3	3.2%
Stroke/transient ischaemic attack/thromboembolism	2	4	4.0%
Vascular disease (prior MI, PAD or aortic plaque)	1	5	6.7%
Age 65–74 years	1	6	9.8%
Sex category (e.g. female)	1	7	9.6%
Maximum score	9	8	6.7%
		9	15.2%

MI, myocardial infarction; PAD, peripheral artery disease.

Pulmonary Risk Assessment

0 to 25 points: Low risk: 1.6% pulmonary complication rate
26 to 44 points: Intermediate risk: 13.3% pulmonary complication rate
45 to 123 points: High risk: 42.1% pulmonary complication rate

Age
- ≤50 years old (0 points)
- 51 to 80 years old (3 points)
- >80 years old (16 points)

Preoperative oxygen saturation
- ≥96% (0 points)
- 91 to 95% (8 points)
- ≤90% (24 points)

Other clinical risk factors
- Respiratory infection in the last month (17 points)
- Preoperative anemia with hemoglobin ≤10 g/dL (11 points)
- Emergency surgery (8 points)

Surgical incision
- Upper abdominal (15 points)
- Intrathoracic (24 points)

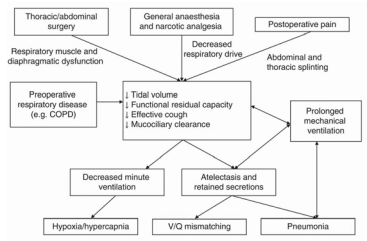
Duration of surgery
- ≤2 hours (0 points)
- 2 to 3 hours (16 points)
- >3 hours (23 points)

What Do You Do if OSA Is Suspected: STOP-BANG

STOP Questionnaire
- Snoring
- Tiredness
- Observed you stop breathing
- Blood Pressure

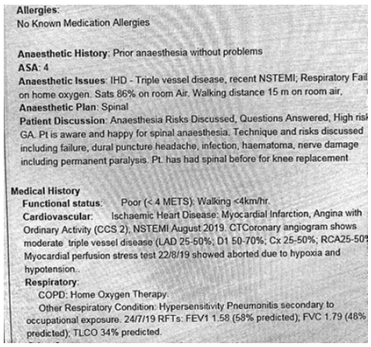
BANG
- BMI >35
- Age >50
- Neck circumference >40 cm (>15.7")
- Gender male

High risk: Yes to ≥3 items → Refer for sleep testing



Mechanical ventilation with gas trapping leading to dynamic hyperinflation and barotrauma (hypotension, pneumothorax and pneumomediastinum

Consolidated Anaesthetic Assessment



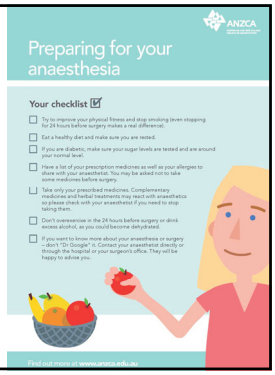
Allergies:
No Known Medication Allergies

Anaesthetic History: Prior anaesthesia without problems
ASA: 4
Anaesthetic Issues: IHD - Triple vessel disease, recent NSTEMI; Respiratory Fail on home oxygen. Sats 86% on room Air. Walking distance 15 m on room air.
Anaesthetic Plan: Spinal
Patient Discussion: Anaesthesia Risks Discussed, Questions Answered, High risk GA. Pt is aware and happy for spinal anaesthesia. Technique and risks discussed including failure, dural puncture headache, infection, haematoma, nerve damage including permanent paralysis. Pt has had spinal before for knee replacement

Medical History
Functional status: Poor (< 4 METS); Walking <4km/hr.
Cardiovascular: Ischaemic Heart Disease: Myocardial Infarction, Angina with Ordinary Activity (CCS 2), NSTEMI August 2019. CTCoronary angiogram shows moderate triple vessel disease (LAD 25-50%; D1 50-70%; Cx 25-50%; RCA25-50% Myocardial perfusion stress test 22/8/19 showed aborted due to hypoxia and hypotension.
Respiratory:
COPD: Home Oxygen Therapy.
Other Respiratory Condition: Hypersensitivity Pneumonitis secondary to occupational exposure. 24/7/19 RFTs: FEV1 1.58 (58% predicted); FVC 1.79 (48% predicted); TLCO 34% predicted.

Patient education & support

- Consent
- Preoperative fasting guidelines
- Anaesthetic options
- Pain relief
- Instruction for medications
- Smoking cessation advice
- Reduce anxiety
- Postoperative placement



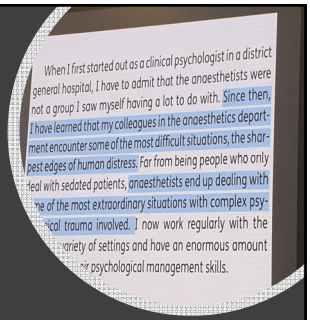
A psychological perspective

"I have learned that my colleagues in the anaesthetic's department encounter some of the most difficult situations, the sharpest edges of human distress."

"Far from being people who only deal with sedated patients, **Anaesthetists end up dealing with some of the most extraordinary situations with complex psychological trauma involved**."

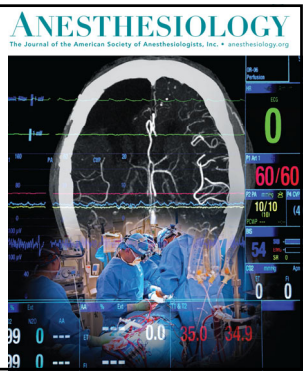
Kate Jenkins

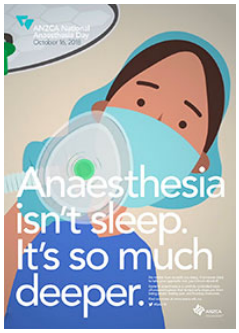
BJA: British Journal of Anaesthesia, Volume 113, Issue 1, July 2014, Pages 4–6,

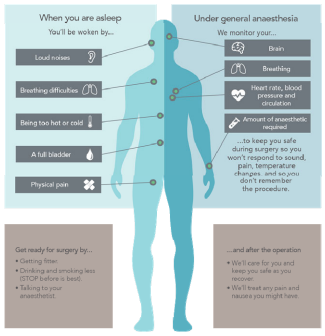


When I first started out as a clinical psychologist in a district general hospital, I have to admit that the anaesthetists were not a group I saw myself having a lot to do with. Since then, I have learned that my colleagues in the anaesthetics department encounter some of the most difficult situations, the sharpest edges of human distress. Far from being people who only deal with sedated patients, anaesthetists end up dealing with some of the most extraordinary situations with complex psychological trauma involved. I now work regularly with the variety of settings and have an enormous amount psychological management skills.

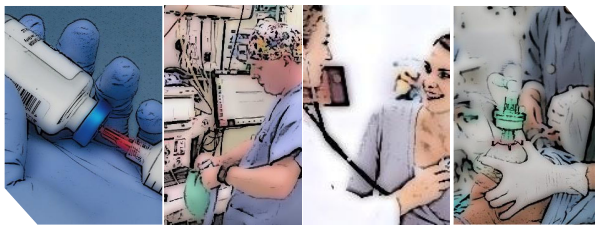
What Anaesthetists actually do during surgery



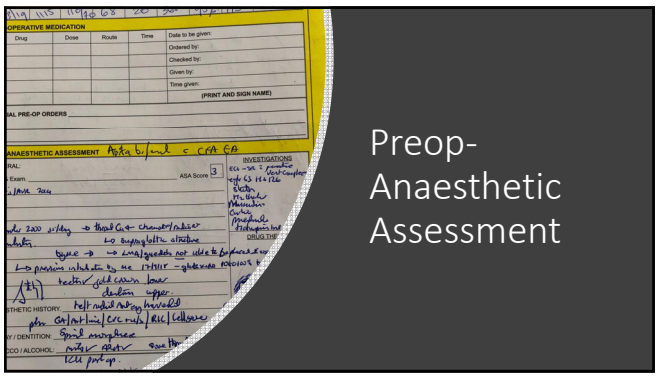


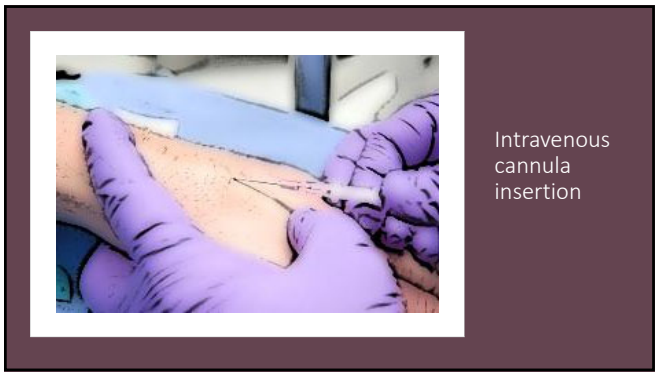


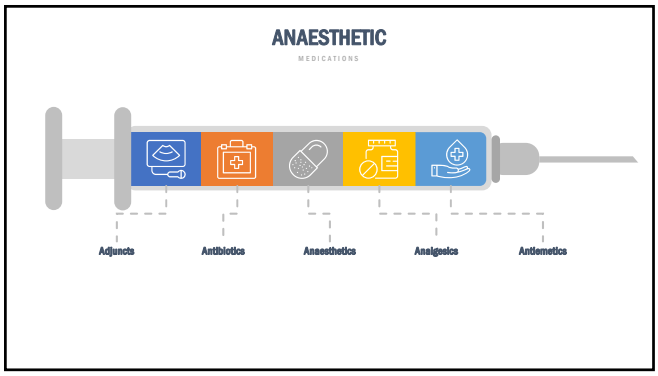
Anaesthetic process

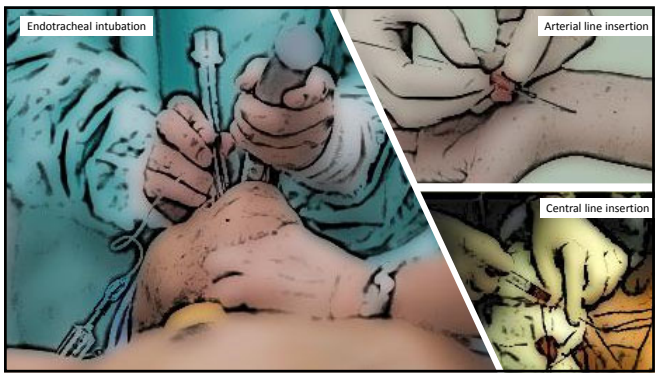


Draw up medication | Equipment check | Final patient assessment | Induction

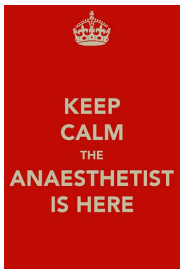

Preop-
Anaesthetic
Assessment

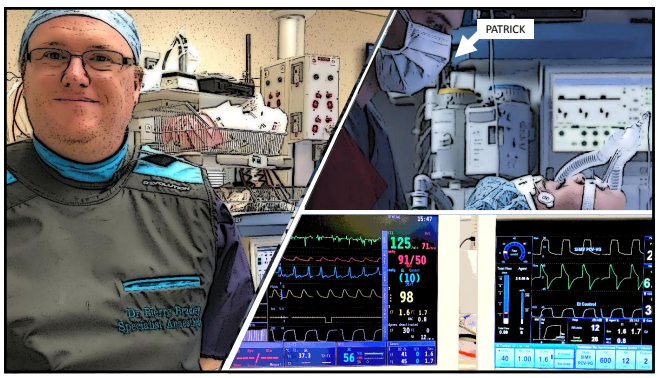

Intravenous
cannula
insertion

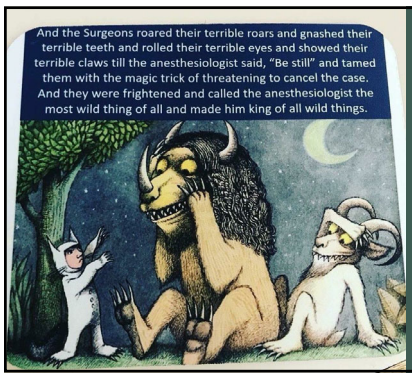

ANAESTHETIC
MEDICATIONS
Adjuncts
Antibiotics
Anaesthetics
Analgesics
Antiemetics



The simpler explanation

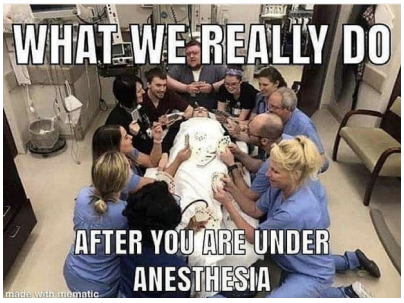






Anaesthetists perceptions of whose in charge during surgery.

SURGERY



Spine surgery

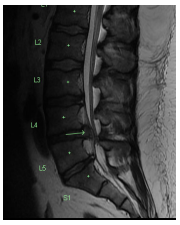
Neural decompression

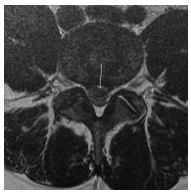
+/-

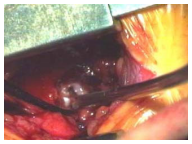
Mechanical reconstruction

- Fusion: instrumented vs non-instrumented
- Motion-preservation

- Anterior, posterior, lateral, oblique

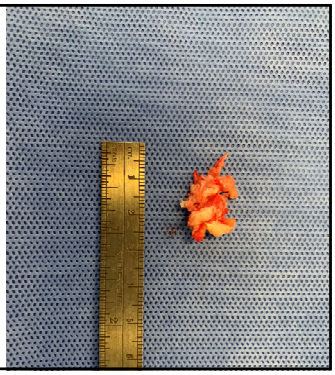


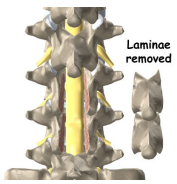


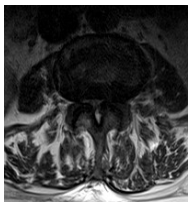


Microdiscectomy
– removal of herniated disc fragment

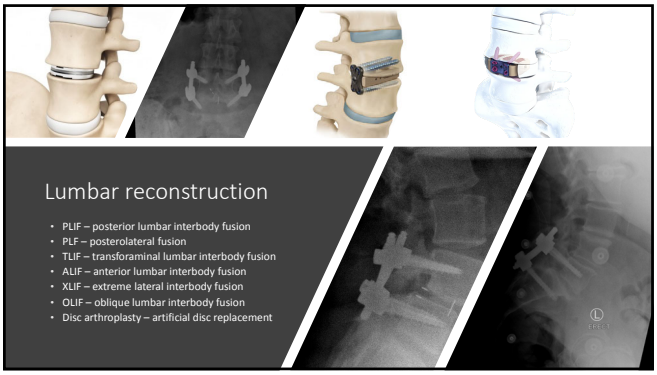
Excised disc







Laminectomy – decompression of canal stenosis

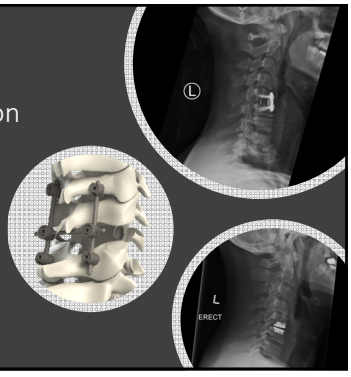


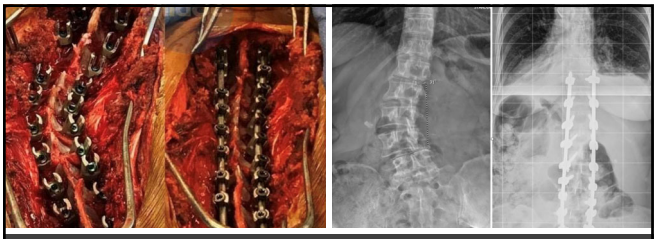
Lumbar reconstruction

- PLIF – posterior lumbar interbody fusion
- PLF – posterolateral fusion
- TLIF – transforaminal lumbar interbody fusion
- ALIF – anterior lumbar interbody fusion
- XLIF – extreme lateral interbody fusion
- OLIF – oblique lumbar interbody fusion
- Disc arthroplasty – artificial disc replacement

Cervical reconstruction

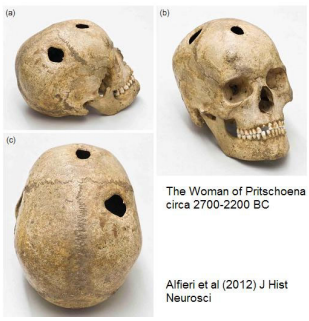
- ACDF – anterior cervical discectomy and fusion
- Anterior cervical corpectomy and fusion
- Posterior cervical fusion
- Disc arthroplasty – artificial disc replacement





Scoliosis Surgery

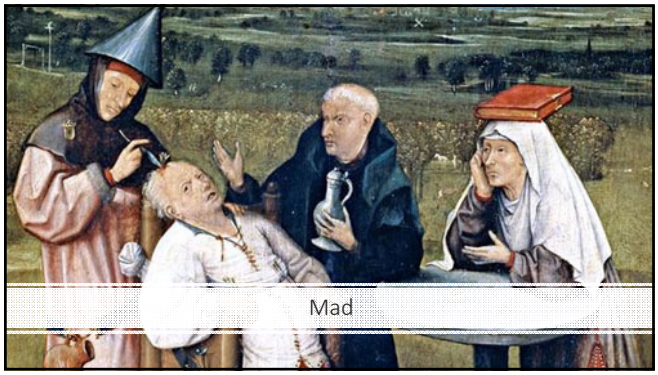
The humble dawn of neurosurgery



The Woman of Pritschoena
circa 2700-2200 BC

Alfieri et al (2012) J Hist Neurosci

Pre-Columbian America

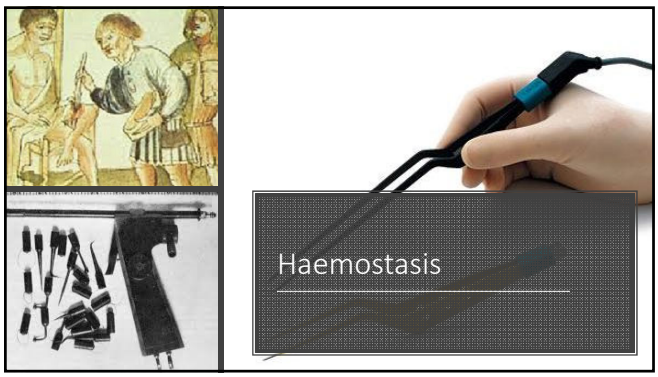


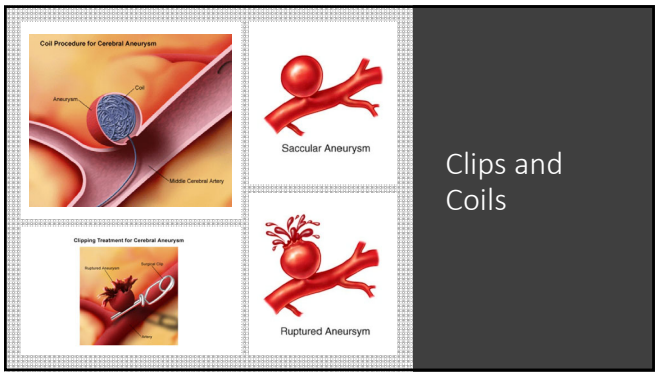
Neurosurgery today

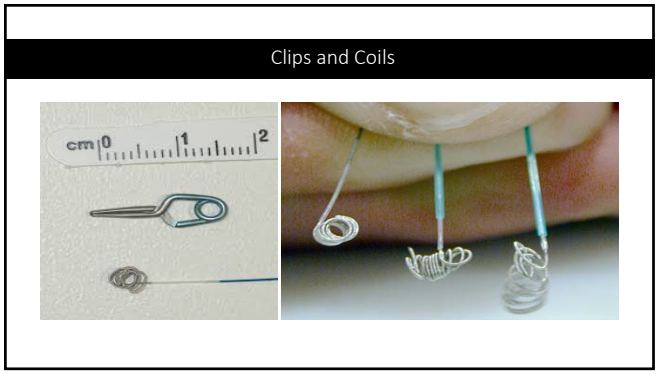
- Microscope
- Drills
- Electrosurgery
- Ultrasonic aspirator
- Microsurgical tools
- Neuronavigation



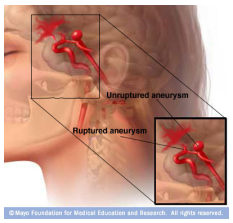

Trephines and Drills

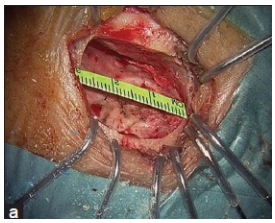

Haemostasis


Coil Procedure for Cerebral Aneurysm
Coil
Aneurysm
Middle Cerebral Artery
Saccular Aneurysm
Clipping Treatment for Cerebral Aneurysm
Ruptured Aneurysm
Clips and Coils

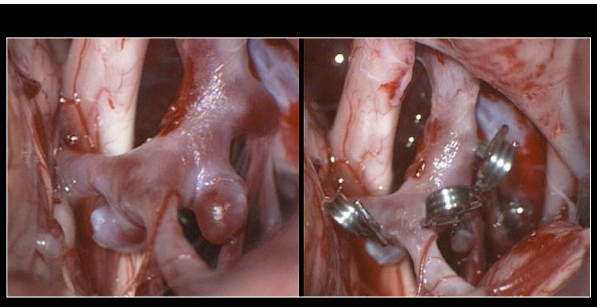

Clips and Coils
cm
0
1
2

Magnification & illumination





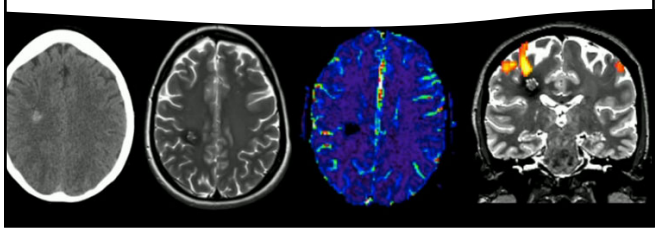
Magnification & illumination



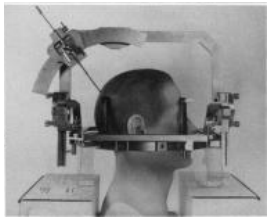
Magnification & illumination

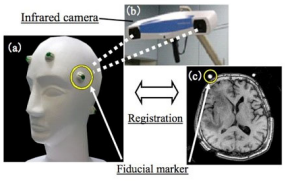
Neuroimaging

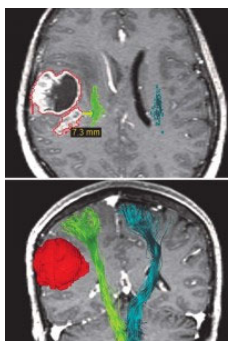
Late 1970s | 1990s | About 2008 | About 2010

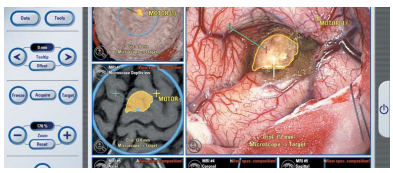


Cerebral Localisation & Neuronavigation



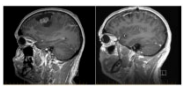




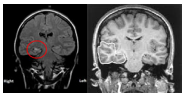


GPS for the brain

Applications



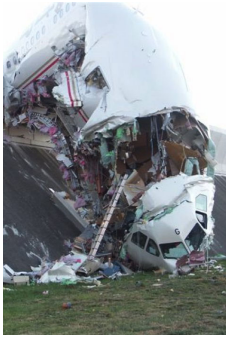
Brain tumour surgery



Epilepsy surgery

Parkinson's disease

Finishing the Surgery



Extubation:
Things to avoid when waking the patient up

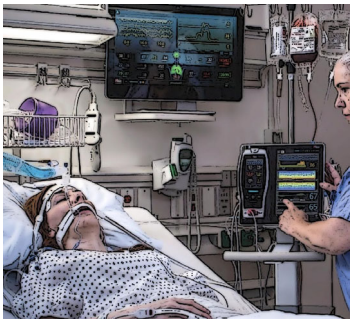
Extubation

Vital parameters normal
- Sats >95% on low FiO2
- SBP> 100 on minimal vasopressors
- Acid base balance

Muscle relaxation reversed
Sedative drugs stopped
Analgesia
Suction & aspiration risk
Advanced techniques? If a difficult intubation

Post-Anaesthetic Care

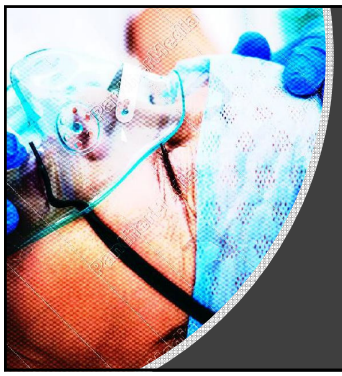
ICU



Post Anaesthetic Care Unit

ISOBAR

- Identify patient
- Situation
- Observations
- Background
- Assessment
- Response & Rational



Cardio-Respiratory Optimisation

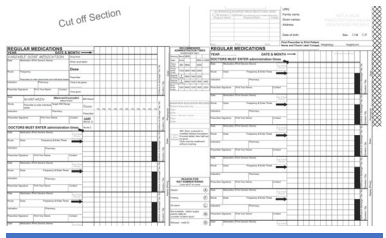
Pain Management

- Titrated IV opioids
- Oral medication
  - Paracetamol
  - NSAIDS
  - Opioids (short & song acting)
- PCAs
- Regional techniques
- Neuroaxial therapy
- Adjuncts
  - Ketamine
  - Lignocaine

Antiemetic Therapy

Risk factors for PONV	Number of risk factors	Incidence of PONV (%)
	0	10
Female gender	1	20
History of motion sickness and/or previous PONV	2	40
Non-smoking status	3	60
Postoperative opioid use	4	80

Fluid Management



Written Ward Management Plan

Antibiotics
Anticoagulation
Analgesics
Antiemetics
Fluids
Nutrition
Mobilisation

Post-operative ward round

- Pain control
- Resolution/improvement/arrest of presenting symptoms
- Blood loss
- Neurological status
- Infection control
- Mobilisation
- Discharge plan: home or rehabilitation unit

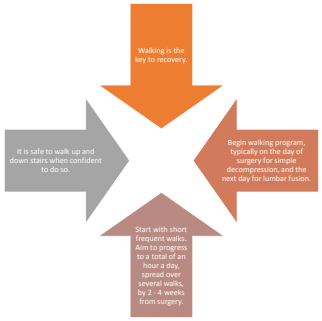
Post-operative rehabilitation

- Variability.
- **Prolonged bed rest after surgery IS NOT required or recommended.**
- Gradually return to a normal pattern of daily life over 2 – 4 weeks for decompression and 6-8 weeks for fusion.
- Brace is typically NOT useful.

Activity/mobility

- Safe to move and position according to comfort.
- Safe to sit - start with short periods and build up.
- Safe to travel by car, but manage trip time & consider interval stopping.
- Do not drive within 24 hours of surgery. After that time it varies according to types of surgery.

Activity/mobility



Activity/mobility

- Back care exercises may be helpful.
- Individual variation in any return to sport plans. Typically return to suitable sports can begin after 3 to 6 months.
- Time frame for return to work will vary according to type of surgical procedure and occupation.

Restriction

- Avoid heavy lifting for three months.
- If lifting, keep back straight. Avoid bending and twisting, bend your knees and use your legs to do the work.
- Avoid straining.
- Don't restrict shoulder movement.

Rehabilitation

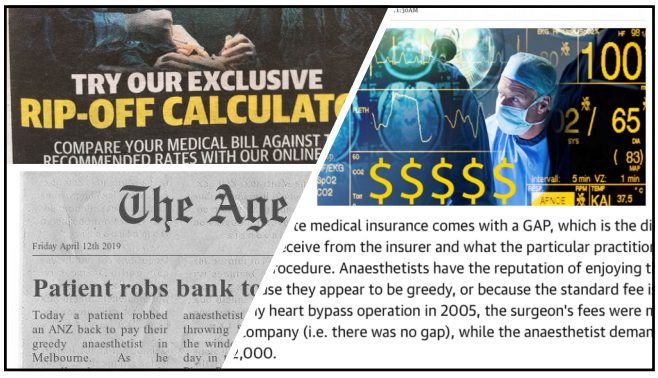
- Range of motion and strength with ultimate aim of returning to close to previous lifestyle.
  - Sciatic nerve glide, core and pelvic strengthen and stability.
- Postural correction.
- Walking exercise.
- Proper lifting techniques, ergonomic evaluation, RTW-specific exercise.

Chiropractic Rehabilitation

- Ensure your chosen approach is appropriate.
- Use conservative management.
  - Adjustments
  - STT
  - Traction
- Collaboration with local physiotherapist that understands Chiropractic role.
- Collaboration with local exercise physiologist that understands Chiropractic role.

Image problems and Perceptions

Medical & Chiropractic

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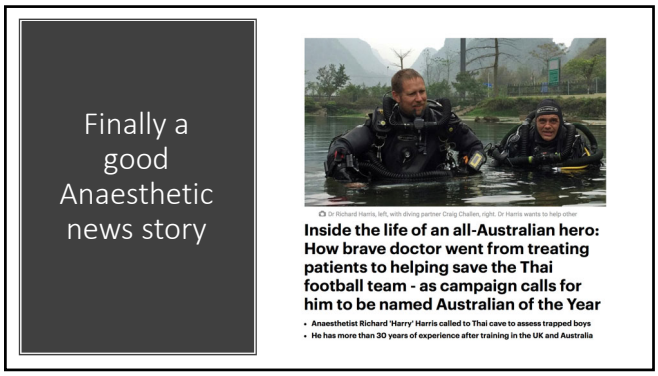
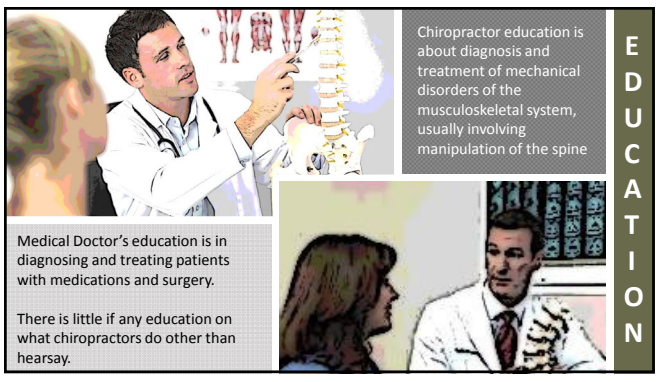
iropractor hanging a baby
Crack quack won't be back
Chiros warned off treating children
CHIROS A PAIN IN THE NECK FOR PATIENTS
CHIROPRACTORS are racking up six times more complaints than physiotherapists over allegations of dodgy advertising, dishonesty and overstepping of sexual boundaries, new data shows.


Finally a good Anaesthetic news story
Inside the life of an all-Australian hero: How brave doctor went from treating patients to helping save the Thai football team - as campaign calls for him to be named Australian of the Year
Anaesthetist Richard 'Harry' Harris called to Thai cave to assess trapped boys
He has more than 30 years of experience after training in the UK and Australia


Chiropractor education is about diagnosis and treatment of mechanical disorders of the musculoskeletal system, usually involving manipulation of the spine
Medical Doctor's education is in diagnosing and treating patients with medications and surgery.
There is little if any education on what chiropractors do other than hearsay.
EDUCATION

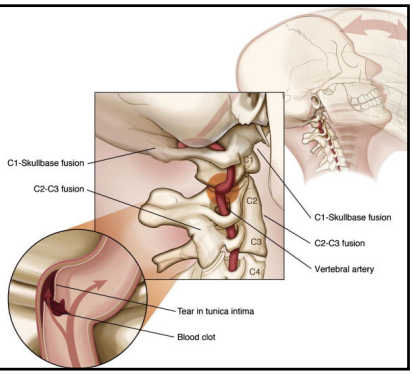
Medical Concerns

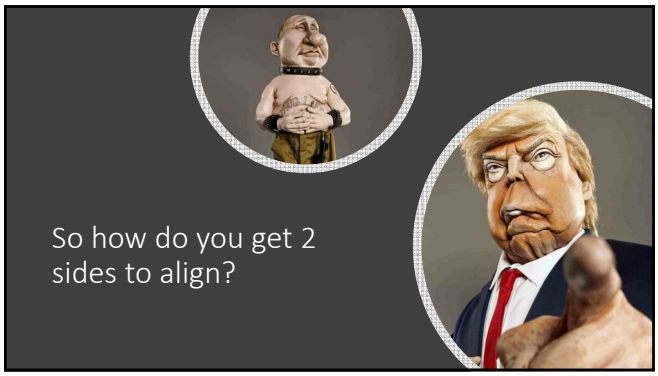
Claims that chiropractors can:

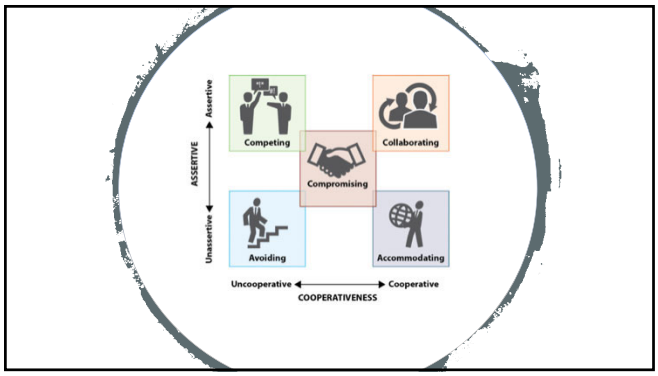
- prevent caesarean births.
- treat diabetes, asthma, reflux and other specific conditions.
- cures the flu.

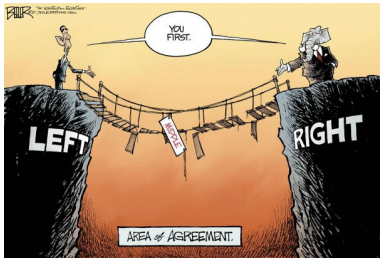
Injury:

- Cerebral vascular accidents caused by vertebral artery dissection following manipulation.

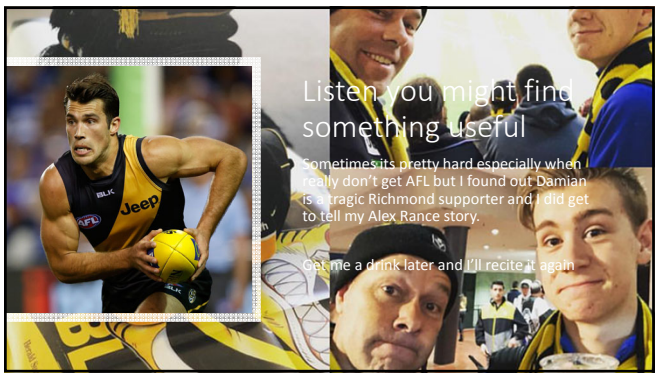






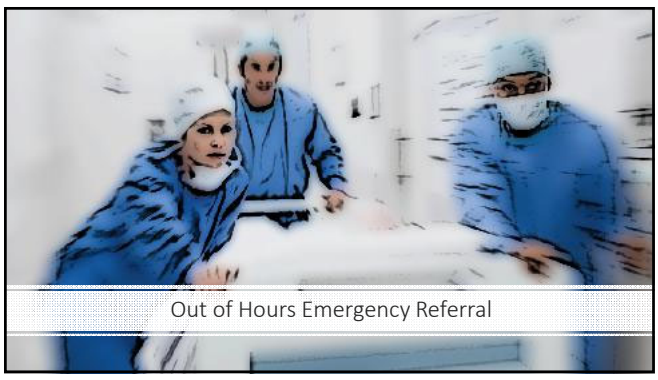


- Communication
- Listen
- Find common ground
- Look for places of agreement
- Seek to understand more
- Find something to work on together
- Praise outcomes



Lower Back Pain Treatment

Family member with LBP
Planned on going to the physio
Discussion with Damian
Tentative & cautious steps



The Chiropractor - GP - Surgeon Relationship Process

- Make time to meet with your surgeons through the year
- Make time to touch base with friendly GP's
  - Remember they don't know what we do most of the time
- Discussion with Patient that you'd like to refer for a surgical opinion
- Letter to surgeon that you have the relationship with with the GP cc'd in the communication – this avoids GP over-ruling.
  - Rec printing and also sending soft copies
- Progress updates with the surgeon and GP via letter or email.