Why this meeting matters –
a case study.

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Anaesthetist and Intensivist

Rockhampton, QLD
Take home messages
The older, co-morbid patient for complex surgery is here to stay.
The post-operative care of these patients is becoming more important.
Communication is paramount.
Case
86 F

Independent

Lives at home

But, does have a few co-morbidities…
Co-morbidities
Moderate AS
(0.9cm², mean gradient 17mmHg)

Moderate PHT
(RSVP 63mmHg)

LV normal
(EF 63%)

Hypertension

IHD; no symptoms

Very mild STML
Anaesthesia
Difficult!

Major bleeding

Had to abandon and bring back for a second operation
Post Operatively
Pulmonary embolism
(simple, commenced on Rivaroxaban)

Never able to mobilise well

Transferred to Private Hospital

Discharged to hospital level care
Independent in own home

Hospital Level Care
Independent in own home

Bad

Hospital Level Care
Tough case

At least she’s still alive

Case closed
5 months later
Minor fall at nursing home

Presents to ED with signs of left septic arthritis (not shocked)

Aspiration of knee; Staph aureus (MSSA)
Problems
(1) Septic prosthetic arthritis

(2) Non-unions

(3) Ideally need to remove all metal-ware

(4) Ideally obtain a stable leg so she can weight bear

(5) Co-morbidity, Frail, Elderly
Surgical Options?
Washouts, r/o metal ware, spacer/ex-fix...

AKA

Palliate

“Special operation”
ICU referral for post-op HDU care
ICU referral for post-op HDU care

Declined
Reasons

Age

Hospital Level Care

Futile surgery

“Like a # NOF”
Patient and Family discussion
(1) Crack on and fix the fracture

(2) If develops MOF ➔ palliate

(3) Prolonged PACU stay

(4) Back to ward with a nursing special
The operation?
“Orthopaedic Artistry”
With one operation...
Source Control

Metalware out

Removal of non-union

Stable leg
**Rockhampton Hospital Anaesthesia Report**

**IV ACCESS**
- 11:47 IVERM  Hand Right 22 g
- 12.13 IV Cub. Fossa Right 0.5 \\

**INDUCTION**
- 13:30 IV, Pre-Day

**REGIONAL ANAESTHESIA**
- 11:56 Anti-Thrombotic Devices: SCDs
- 13:17 Fluid Warmer Forced Air Warmer
- Warm. Blanket applied 3 lead ECG, NIBP, SpO2, ETCCO2, PH, PO2
- Agent Analysis, Vent alarm BIS Monitor, Temp, Probe - nasal, Naphy Vapour Analyser

**EQUIPMENT**
- 13:00 ETT Tube - PVC, Oral 7.0, no complication

**AIRWAY**
- 13:00 ETT Tube - PVC, Oral 7.0, no complication

**LARYNG VIEW**
- 13:00 Supine

**POSITION**
- 13:00 Supine

**CIRCUIT**
- 13:00 Circle

**Blood Gas**
- 10:29: B.P.: 2, Glucose: 4.8, Hb: 122, HCO3: 24.6, K+: 4.2, Na+: 131,
  PCO2: 50.8, PH: 7.29, PO2: 43

**VENTILATION**

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**Blood Loss (ml)**
- 0

**11:10 Awaiting surgeon**

**11:30** **12.00** **12.30** **13.00** **13.30** **14.00** **14.30** **15.00** **15.30** **16.00** **16.30** **17.00**
1:15 Awaiting surgeon Awaiting surgical setup
1:15 Awaiting patient to place lines in recovery
1:18 Entered Induction
1:19 Entered Theatre
2:21 Arterial line - Radial left 20g
2:22 Oxygen
2:29 Final check completed in PACU
2:41 Wires removed
3:00 Induction
3:13 Surgery Started
3:28 Eyes - taped, free from pressure, Arm - Both arm board, padded < 90 degrees Legs - Right TEDs & SCDs
Head - pillow
3:30 Knife to skin
3:37 CVP Line - U right multilumen
3:37 Dr Singh supervising Anaesthetic while I inserted CIVL
4:30 Bloods taken and sent
4:30 Level one primed
4:30 Hb 11.2
6:24 VBG Taken
6:59 Anaes. Reversal
7:01 Patient left Theatre

POST-OP ORDERS
PROTOCOLS: Fentanyl protocol. Antiemetic protocol

NAME:

SIGN: __________________________
Post-operatively
2U RBC’s

Low grade delirium

Tinkered with diuretic, beta-blocker, anti-coagulation, O2 therapy

After 3/7 I discharged her from my care

Day 2; I saw her…
...fully weight bear through that leg!

(first time in 5 months)
Great job
Well done
Case closed
4 weeks later

Another call from the Orthopod
“She wants her other knee done!”
Goal = resection of non-union, hinge knee insertion.
ICU referral for post-op HDU care
ICU referral for post-op HDU care
Reasons

Done well

Survived major, septic operation

Will offer HDU support
“If she has a complication and requires ICU organ support, I will palliate her.”
Everything was fine until she...
...Cardiac Arrested
You can’t get her extubated, send her to ICU intubated."

But, that wasn’t the deal I had with ICU.
“If she has a complication and requires ICU organ support, I will palliate her.”
PACU
Extubated in recovery

Low dose Noradrenaline

Fluid boluses

High flow O2
HDU
48 hour stay

POCD

Mild renal injury

Inotropes weaned quickly

Discharged to ward on a **Friday evening**
Ortho Ward
Low output state

Diuresed

Haloperidol increments

Delirium settled quickly over a few days

Rehab after 2 weeks
Great job
Well done
Case closed
4 weeks later.

Another call from the Orthopod.
“She wants to bend her first knee!”
High frame

+ +

Two person assist

= =

Rest home

OR

High level nursing care
Recap
Independent in own home

Hospital Level Care
Moderate AS
(0.9cm², mean gradient 17mmHg)

Moderate PHT
(RSVP 63mmHg)

LV normal
(EF 63%)

Hypertension

IHD; no symptoms

Very mild STML
Intraoperative Cardiac Arrest
Who has been hospitalised for 6 months
Now wants another operation

(Very elective)
What would you?
(lets vote)
What option would you choose?

- Refuse surgery
- Do surgery after a risk discussion

Results
Anaesthetic SMO Group consulted ➔ majority of department declined her for surgery

Orthopod happy to do operation

Family complained regarding not doing the ‘last’ operation

Seen in PAC with family and risk explained
So what next...
Referred to Brisbane
High risk Orthopod happy to do operation

Anaesthetics happy to provide care

ICU happy to support perioperatively

Surgery proceeded
ICU
Large dose of Noradrenaline initially

IV A/B

Norad came off by Day 3

D/C to ward
Ward
Brisbane
No major complications

Began mobilizing

In RBWH for a total of 4 weeks
Ward
Rockhampton
No real complications

Transferred to Rehab – 2/52
post transfer
Rehab
4 weeks

Independent out of chair and walk with a...
Who has been hospitalised for 12 months
Hospital Level Care

Independent in own home
Hospital Level Care

\[ \downarrow \]

Independent in own home

\[ \times \]
MOW x 5 per week

Daily family visits

Personal care home help x 2/week

Walking with a frame
8 months later
MOW x 5 per week

Daily family visits

Personal care home help x 2/week

Walking with a frame
Unchanged

Walking with a frame

Daily far

MOW x 5 per week
Grateful son says Rockhampton hospital is ‘amazing’
Issues
this case raises
Communication between teams, patient and family.
(2)

Where and who should look after ‘soft’ patients.
Was this case a good use of the health dollar?
She got home, but how long will she live?
Great job
Well done
Case closed
But, what happens when she comes in with a periprosthetic fracture?
Take home messages
The older, co-morbid patient for complex surgery is here to stay.
The post-operative care of these patients is becoming more important.
Communication is paramount.
Thank you