

Sameday laparoscopic
cholecystectomy at
The Royal Hobart Hospital

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Background

- In UK, vascular surgery still under the umbrella of general surgery
- Extensive exposure to laparoscopic surgery during surgical training
- Previously worked as Consultant General Surgeon with interest in Vascular Surgery, replacing a very general surgeon with large waiting list of cholecystectomies.

Background

- During training - laparoscopic unit enthusiastic about day case lap chole but nursing staff resistance prevented this
- During UK consultant position - day case unit not willing to consider day case lap chole and no prepared to buy equipment. Consultant colleagues not supportive.
- Only achievable in private practise

Background

- Appointed Vascular Surgeon at RHH
- Not enough operative vascular workload to fill allotted theatre sessions thus offered to help with general surgery waiting list.
- Day case lap chole performed by one other VMO

Background

- First day case lap chole:
- 47 year old female
- First on morning list
- Straight forward procedure
- At completion of list - 2 hours later, end of list patient review
- Patient had gone home

Implimitation

- We did not set out to target Day Case lap chole
- No special arrangements

Results

- August 2003 - August 2004.
- 75 listed for lap chole of which 70 listed as day case lap chole
- 6 day cases did not go home on same day (admission rate 9%)
 - 2 conversions (bleeding, difficult to dissect)
 - 3 admitted to ward - not well enough to go home
 - 1 admitted for pain

Results

- July 2003 - June 2004
- 115 listed as day case lap chole
- 28 days readmission rate 5% (6/115)

Results

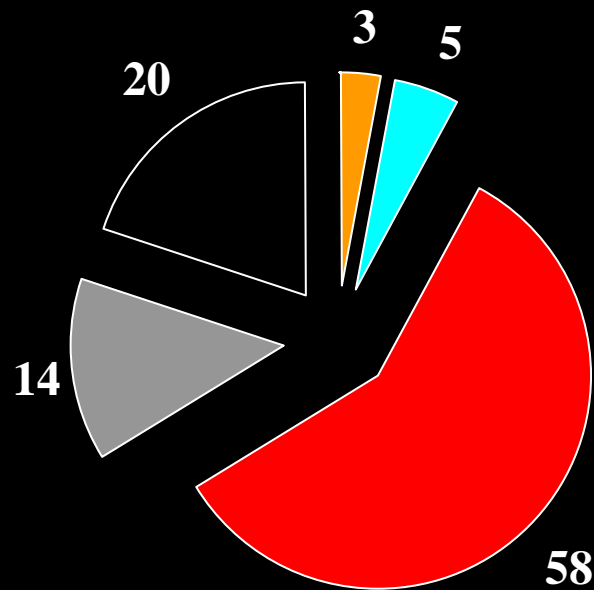
Reason for readmission	Length of stay (days)
Pain – collection in gallbladder fossa – treated conservatively	2
Pain – small bowel obstruction due to loop of bowel caught at umbilical port closure	10
Pain – intraoperative bile spillage – treated conservatively	3
Pain – no reason found	4
Pain – no reason found	5
Pain – post op bile leak treated by laparotomy, ERCP and stent insertion	17

Results

- Attempted contact in 111 patients 24 hours post operatively by telephone
- Unable to question 20%

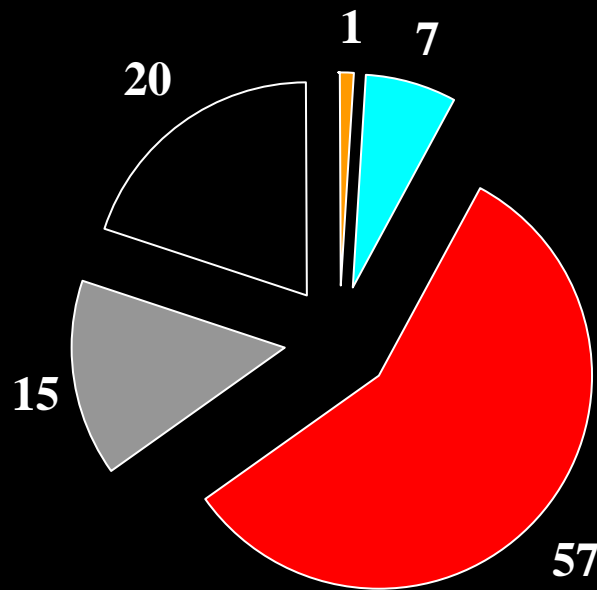
Results

General well being



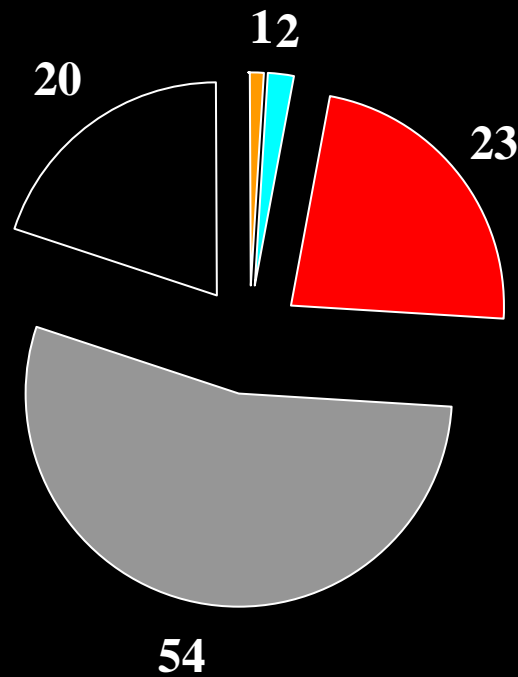
Results

Pain



Results

Nausea and vomiting



Patient requirements

- Younger patients
- No major medical problems
- Home within reasonable travelling distance
- Responsible carer at home
- Compliant patient and confidence in the system - it will work for them

Patient expectations

- This is how we do things
- Through explanation of operation - emphasis on minimal access and realistic conversion rate and consequences
- Complications - post operative nausea, vomiting and pain

Patient expectations

- Plan for same day discharge - reinforced at every step
 - initial consultation
 - pre operative assessment
 - admission staff
 - surgical and anaesthetic staff
 - recovery staff
 - day case staff

Anaesthetic considerations

- Appropriate short acting/duration anaesthetic.
- Pain - adequate post operative analgesia - long acting NSAID and regular post operative non opioid analgesia
- Nausea and vomiting - 30% of Tasmanian anaesthetists provide no or non effective antiemetics.
 - 5HT3 antagonist plus dexamethasone

Surgical considerations

- Minimise bile spillage
- Copious irrigation for bile spillage
- Cholangiogram only if indicated
- No benefit for local anaesthetic infiltration
- Drain all cases - warn patients, its routine
- Relaxed day case unit/theatre atmosphere
- Training

Nursing consideration

- All giving the same message
- Patient motivation in recovery - get them up and out of bed as soon as possible
- Attend to analgesia and nausea requirements promptly
- Maintain hydration with IV fluids
- Fluid and diet as tolerated
- Remove drain just prior to discharge

Nursing consideration

- Day case unit is busy, noisy and beds are uncomfortable - encourages mobilisation

Theatre requirements

- Initially only one case per list
- Now limited to three cases per list by equipment
- Reduce costs by using non disposable kit
- Only open suction and irrigation when required

Administrative issues

- Allocate date of operation when seen in clinic
- Morning list or early on afternoon list - also helps to reduce anxiety and prolonged fasting
- Pre admission nursing and medical assessment (anaesthetic and surgical)
- Ready access to telephone advice
- Admit to day case ward

How do we compare?

- Ullevaal University Hospital, Norway
- BJS July 1997
- Over one year
- 200 lap choles
- 188 (94%) discharged within 8 hours - 4 conversions, 2 required postoperative ERCP
- 8% required readmission

How do we compare?

- Royal Berkshire Hospital, Reading UK
- BJS March 2004
- Single surgeons results over 2 years
- 357 lap chole of which 154 (43%) listed as day case
- 22 (14.3%) required overnight admission (3 conversions)
- One readmission.

How do we compare?

- Leeds Institute for Minimally Invasive Therapy, UK
- J Hepatobiliary Pancreat Surg 2003
- 6 year period
- 744 lap choles of which 140 (19%) listed as day case
- 23 (16%) required overnight admission
- Two readmission's

Two approaches

Very selective

- Advantages
 - low admission rate
 - ? Low readmission rate
- Disadvantages
 - Reduces the number listed for day case
 - Will miss those who could have been done as day case

All comers

- Advantages
 - less administration
 - standard protocol
- Disadvantages
 - higher admission rate
 - ? Higher readmission rate
 - administration issues with bed availability

Conclusions

- Day case laparoscopic cholecystectomy is feasible
- The whole team needs to be enthusiastic and giving the same message

ROYAL HOBART HOSPITAL DAY SURGERY UNIT



