

Integrated Laparoscopic Operating Theatres

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Why

- ❑ Current stack system too heavy to move, moving and handling.
- ❑ Wiring system and button pushing complicated.
- ❑ Having to individually set each piece of equipment, turn around times.

The Tardis!

- ❑ As you can see very complicated.
- ❑ Problems when picture in picture is required
- ❑ Too many opportunities for baby technos to interfere
- ❑ Which button do I press next?
- ❑ Shall I plug this in here?



What We Have Now



Health and safety

- ❑ Problems with old style theatres trailing cables, heavy equipment to manoeuvre.
- ❑ Reduced patient access
- ❑ Having to set up each individual piece of equipment.

Computerised communication tower

- ❑ SCB- Storz Communication Bus, future proofed.
- ❑ AIDA-advanced image and data archiving, allows video editing, printing and part of EPR.
- ❑ Media Control- powerful tele video conferencing system and transmission of images, can be used for telemedicine, telementoring and remote teaching

Integrated Operating Theatre

- State of the art
- Scrub team controlled
- Links together via interface, all surgical equipment including op table, room lights, diathermy, etc.
- Future proofed, important.

Advantages

- ❑ Being boom mounted is important as this much safer for equipment.
- ❑ Easier for staff to move, health and safety.
- ❑ Enables us to position monitors where they are required.
- ❑ Trailing cables are removed from floor.

Advantages

- Ease of use for all theatre staff.
- Training time: by the end of two weeks regular staff where happy to use system on their own.
- Touch screen enables circulator to change settings without entering sterile field.

Advantages

- Having the system all wired and mounted to the ceiling means that people can't borrow it!!
- Trouble shooting is much less complex as once system is set up less to go wrong, in theory !!!!!
- Stops hybrid systems being used so always get best quality image.

Location

- ❑ As some equipment can be remote located less equipment in theatre.
- ❑ Infection control issues etc
- ❑ Computers are now smaller and as we now have flat screens the equipment occupies a smaller area.

Advantages: remote controller

- Allows the scrub person to alter settings and become more self sufficient less people in theatres these days.
- Better as allows you to alter many other settings including light control, safety issue.
 - user friendly, as not on stand .
 - however need extra drape.

Disadvantages

- ❑ Training and competencies, however all specialities have new equipment.
- ❑ Team approach ever more important, lap surgery is a team effort.
- ❑ Initial stages reliant on company for problem solving until experience gained.
- ❑ Getting funding!!

Future Aspirations

- ❑ DVD writer to store moving images on, storage still an issue.
- ❑ Facility to always record the images.
- ❑ Infra-red to remove the cables.
- ❑ ?voice activation of real benefit, especially in times of stress!!!!.
- ❑ More equipment to be remote located.

Hand Instrumentation

- Take apart instruments, cleaning, reasonable cost less than £500 per instrument.
- Telescopes all 5 mm, 30 degree.
- Basic needs for colorectal op Johannes X 2 and ultrasonic shears (multi purpose grasper, coagulate and cut, dissect

Operating Tables

- ❑ Maquet ALM table.
- ❑ Suitable for bariatric surgery
- ❑ Split leg, health and safety , only put legs up when you need to, good for patient and surgeon.
- ❑ Table interfaces with OR1.

Costings

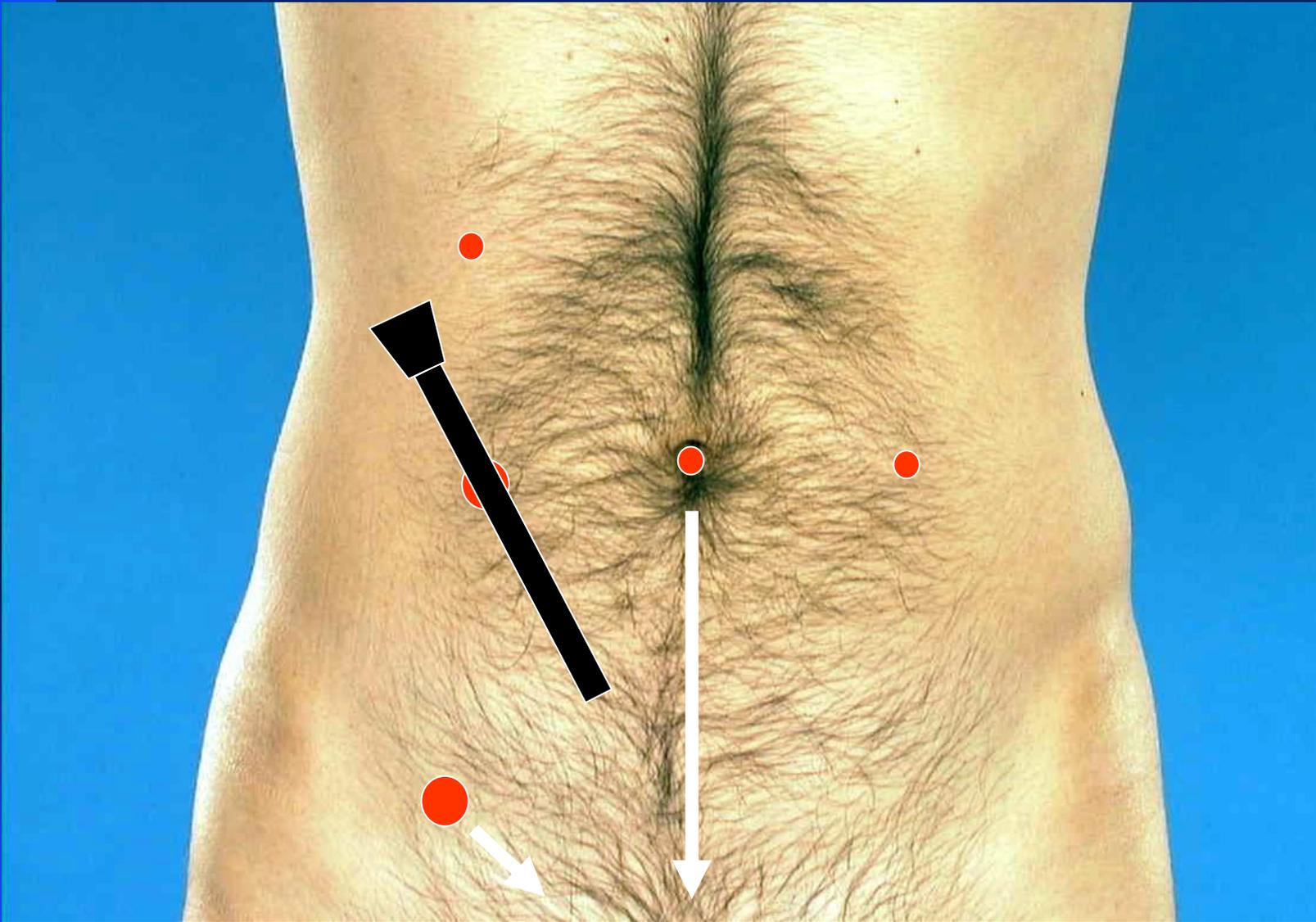
- Ileocaecal resection £655.00
- Right hemicolectomy £516.36
- Left hemicolectomy £435.00
- Subtotal colectomy £740.00
- Sigmoid Colectomy £611.15
- Anterior resection £1062.50
- Abdominoperineal £755.00
- Restorative pouch £1355.00

Blood Loss (51 patients).

- 40 cases laparoscopic < 100mls.
- 5 cases, 4 lap 1 conv: 105-500.
- 3 *conv*: **1050-1500**
- 3 cases laparoscopic not recorded

Team Working

- ❑ Invest in Theatre team
- ❑ ERP programme to realise real cost benefit
- ❑ Needs to be a Trust wide adoption of the technique.
- ❑ Get the anaesthetist on side!
- ❑ Work with another colleague, surgeon, moral support.



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Thank You For your Time.

