### Outcomes of Laparoscopic Hysterectomy in Glangwili Hospital

Anuja Joshi, Mugahid Abbasher, Islam Abdelrahman

PRESENTED BY:

DR ANUJA JOSHI

MTI TRAINEE

GLANGWILI HOSPITAL



#### Overview

- Abdominal Hysterectomy Vs Laparoscopic Hysterectomy (Literature review)
- Audit of Laparoscopic Hysterectomy in Glangwili Hospital
- Patient satisfaction survey

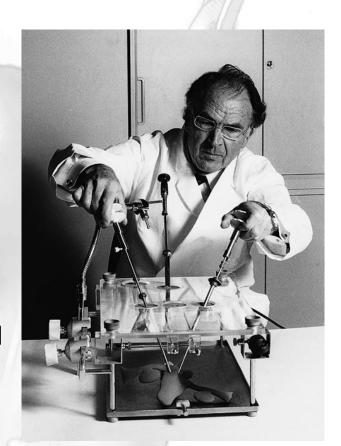


#### Milestones -

- 1813- Conrad Langenbeck first VH
- 1863- Charles Clay (Manchester) Subtotal AH

These approaches remained the only two options until the latter part of the 20th century

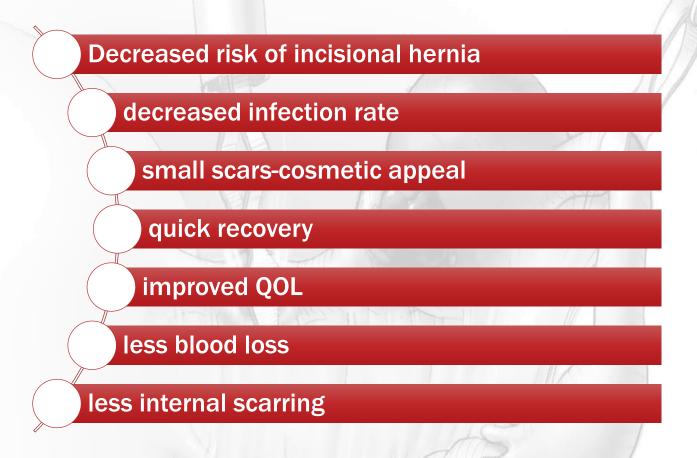
- 1980s Kurt Semm suggested the use of Laparoscopic technique in hysterectomy
- 1989- Harry Reich- Laparoscopic-assisted vaginal hysterectomy (LAVH)
- 1993 Harry Reich Total Laparoscopic Hysterectomy



**Professor Semm** 



#### Endoscopic era -





Despite all these advantages, more laparotomies are being performed as a first line surgery in developing, and even in developed countries

# Abdominal Hysterectomy (AH) vs Laparoscopic Hysterectomy (LH) - Benign Conditions

- Aarts et al. in 2015 ¹ carried out a Cochrane Systematic Review of 47 RCTs with 5102 women comparing the surgical approaches of hysterectomy in benign gynaecological disease
- 25 RCTs involving 2983 women specifically compared LH to AH and found that there was a quicker return to normal activities in the LH group compared to the AH group

The mean difference was 13.6 days (95% CI)

#### Also associated with

- Shorter duration of hospital stay
- Fewer wound infections
- Improved QoL in the first months and at 4 years post-surgery



## Total Laparoscopic Hysterectomy (TLH) vs Total Abdominal Hysterectomy (TAH) - Endometrial Cancer

 Galaal et al. in 2012 ¹ carried out a Cochrane Systematic Review of 8 RCTs involving 3644 women comparing the above for the management of early stage endometrial cancer

Women in the laparoscopy group lost significantly less blood (MD = **106.82 mL**, 95% CI) & was associated with a significantly shorter hospital stay.

Wang et al. in 2013 <sup>2</sup> carried out a meta-analysis of 9 RCTs involving 1263 patients comparing the above approaches in early-stage endometrial cancer It showed that TLH was associated with overall Lower risks of major complications.



- 1. Galaal K, Bryant A, Fisher A, Al-Khaduri M, Kew F, Lopes A. Laparoscopy versus laparotomy for the management of early stage endometrial cancer. Cochrane Database of Systematic Reviews. 2012;.
- 2. Wang H, Ren Y, Yang J, Qin R, Zhai K. Total Laparoscopic Hysterectomy Versus Total Abdominal Hysterectomy for Endometrial Cancer: A Meta-analysis. Asian Pacific Journal of Cancer Prevention. 2013;14(4):2515-2519.

#### Cost effectiveness

Procedure	Cost of theatre time (£)	Average nights in Hospital (cost £225) (6)	Cost (£)	Total cost (£)
Abdominal hysterectomy	453.10	5.00	1125.0 0	1578.10
Vaginal Hysterectomy	395.72	3.00	675.00	1070.72
Laparoscopic hysterectomy	788.37	2.50	562.50	1350.87
Day case laparoscopic hysterectomy	788.37	0.00	0.00	788.37

#### **Our Audit**

It is an ongoing study which was initiated in 2010 & is audited on yearly basis to evaluate perioperative & postoperative outcomes of Laparoscopic Hysterectomy by Mr Islam



#### Aim:

 To analyse perioperative & postoperative outcomes of Laparoscopic Hysterectomy with a specific focus on patient satisfaction

#### Methodology:

- A retrospective audit of the most recent 51 cases of Laparoscopic hysterectomy.
- Data was collected from clinical notes & patient satisfaction surveys



#### Our practice

- Pre-op leaflets
- Use a team which is familiar
- Training theatre staff including:
  - Position of patient, arm at sides, deep trendelenberg using *yellowfins stirrups*, Foam mattress to prevent cephalad migration & use of instruments.
- Appropriate padding in order to prevent nerve compression injuries
- To coagulate -we prefer use of enseal due to its nanoparticle thermostatic technology and as the lateral thermal spread is very minimal i.e 1 mm
- V-care manipulator
- Vault closure with barbed suture or interrupted vicryl
  - Drain & catheter to be removed
     6am the following day
  - Patient discharged 24 hours later –
     5pm following day

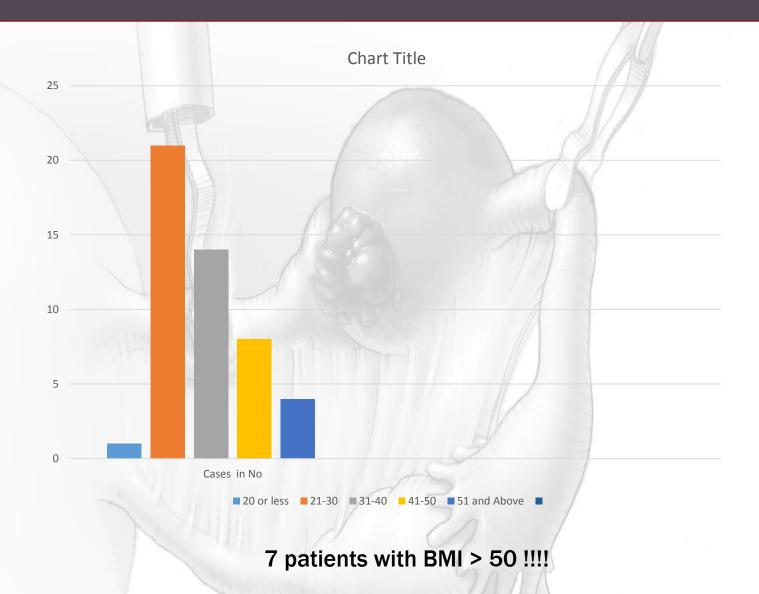






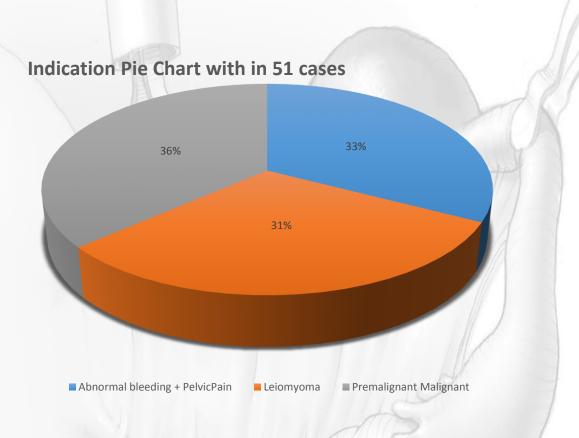


#### 1. BMI





#### 2. Indication





Most of the premalignant endometrial lesions turn out to be IA & IB

#### 3. Blood loss & drop in Hb

- The estimated intra-operative blood loss was less than 300ml
- In Studied 51 cases, 49 patients had the drop in Hb of 1-1.5 gm. Remaining 2 had Hb drop of 2.2 – 2.5gm
- No patient required blood transfusion



#### 4. Operative time

- We considered operating time since patient entering the theatre till her exit from the theatre back to the recovery ward which was poorly recorded.
- The average operating time in our unit was ≤120 min which is not very accurate & we aim to correct this in the future
  - The actual operating time was much less on average 45-90 minutes
- These values match with the values mentioned by NICE <sup>1</sup>



#### 5. Uterine weight (from sx histology)

- The weight of uterus checked randomly in 11 patients ranged from 200 gm to 1300 gm. (In 3 cases out of 11 the weight was more than 1 kg)
- The average weight in some other studies was 1002 g (Uccella S et al 2014), 700 g (R Sinha et al 2009).
- The sizes of uteri (clinical assessment) ranged from normal size to 16 week size
- Surgical adaptations were necessary in order to facilitate the removal of larger uteri
  - Placing port above the umbilicus
  - Use of 30 degree scope
  - Vaginal bisection/encoring of the uterus



#### 6.Intra-op & post-op complications

Total Cases (51)			
	Our Audit (n=51)	NICE %	Donnez ET AL
Bowel injury	0	2	0.06
Bladder injury	1 case	1	0.38
Ureteric injury	0	1.3	0.32
Vessel injury	0	3	0.06
Blood transfusion	0	0.97	0.06
Conversion to Laprotomy	1 case	2.79	1
vault dehiscence	0	2	0.018
PE/ DVT	1 case	1	1



#### 7. Stay in the hospital

Duration of Stay	Patients	
24 hours	31	
2 days	12	
3days	2	
4 days	1	

- Average Length of Stay is 1.40 but majority of patients were observed to get discharged within 24 hours
- The prolonged stay was with patients who had a combined vaginal repair.



#### 8. Patient satisfaction

- Noted from the satisfaction surveys given to patients
- Overall the response was very positive- praising ward staff, anesthetists & surgeons
  - "Feeling wonderful, would recommend key-hole surgery"
  - "Staff were very helpful"
  - "Anaesthetist was very kind and reassuring"
  - "When Nursing staff and the surgeon met me on the wards postoperatively, I felt that I received personalised care for which I am grateful"
  - "Fantastic surgeon, staff was wonderful and everybody was very helpful"
- 89 % have completed the satisfaction survey & 100 % of them had received the leaflet
- In the majority of them it took on average 4-5 weeks for a complete recovery
- Learning point -2 patients wanted more emphasis on post-op care

#### Discussion-

- Maximum benefit High BMI & multiple large fibroid uterus
- The traumatized group of cancer patients can be benefitted with laparoscopy due to less pain & early discharge



#### Recommendations/future plans -

- Continue familiarizing theatre staff & assistant staff to the procedural steps which in turn will shorten the duration of procedure. The staff lead should be notified of the high risk cases in advance to gather a proper team.
- Timing of *actual procedure* (after position till closure of ports) should be noted & mentioned in op notes
- Emphasizing the importance of '1 day stay' of LH patient to ward staff hence conducting the educational sessions about importance of early ambulation & discharge.
- To continue this yearly audit in order to reach highest standards



# 66DON'T PRACTICE UNTIL YOU GET IT RIGHT.

PRACTICE
UNTIL YOU CAN'T
GET IT WRONG.











#### Last Important Survey

## **THANK YOU**

A survey by IMA showed 56% of doctors do not get a comfortable 7 hour sleep most days of the week.

