

Surgical management of Endometrial cancer

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Objective

- Surgical management
 - Procedure performed
 - Oophorectomy
 - Peritoneal fluid cytology
 - Lymphadenectomy
 - Radical hysterectomy
 - Omentectomy/ Debulking surgery
- Evolution in management
 - Laparotomy
 - Vaginal
 - Laparoscopic
 - Robotic
- Derby practice

FIGO Staging 2009

- Stage I Tumour confined to the corpus uteri
- IA No or less than half myometrial invasion
 - IB Invasion equal to or more than half of the myometrium
- Stage II Tumour invades cervical stroma, but does not extend beyond the uterus
- Stage III Local and/or regional spread of the tumour
- IIIA Tumour invades the serosa of the corpus uteri and/or adnexae
 - IIIB Vaginal and/or parametrial involvement
 - IIIC Metastases to pelvic and/or para-aortic lymph nodes
 - IIIC1 Positive pelvic nodes
 - IIIC2 Positive para-aortic lymph nodes with or without positive pelvic lymph nodes
- Stage IV Tumour invades bladder and/or bowel mucosa, and/or distant metastases
- IVA Tumour invasion of bladder and/or bowel mucosa
 - IVB Distant metastases, including intra-abdominal metastases and/or inguinal lymph nodes

Patient factors

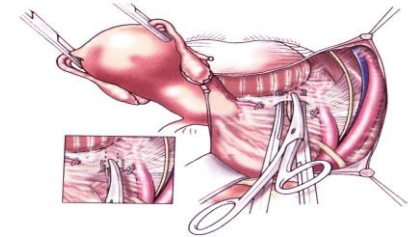
- Age
- Medical co-morbidity
 - Diabetes
 - Cardiac
- Raised BMI >50- 60
- Previous surgery
- ? Dementia
- Anaesthetic issues- Anaesthetic review pre-op

Hysterectomy

- Remove central disease
- Cervix & fallopian tubes
- Types:
 - Simple
 - Radical
- Route

Radical hysterectomy

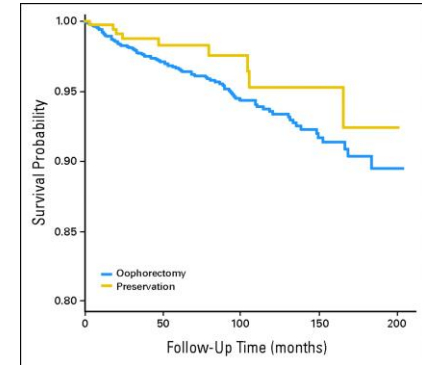
- Some studies suggest improved prognosis in stage 2 disease
- Sartori et al & Cohen et al show improved survival with Radical hysterectomy vs simple hysterectomy (94% vs 75%)
- Consider in cases with cervical involvement



Sartori et al, IJGC, 2001
Cohen et al, , Obs & Gynae , 2007

Role of Oophorectomy

- Rationale
 - Staging (5-13% involvement)
 - Remove synchronous tumours
 - Remove oestrogen stimulation
- ? In young pre-menopausal women?
- No evidence detrimental outcome of leaving ovaries



Wright J D et al. JCO 2009;27:1214-1219

Role of peritoneal fluid cytology

- Not independent prognostic factor in stage 1-2 disease
- New FIGO staging does not include
- Done routinely previously
- Some studies suggest cytology based stage 3a same outcome as stage 1

Role of Lymphadenectomy

- Diagnostic for staging
- Therapeutic?
- Controversial
- Risk of +ve node related to
 - Grade
 - Myometrial invasion
 - Tumour Size > 2cm
- Cx Stromal invasion
- Age
- Grade 1 - No Invasion- < 5% pelvic nodes
- Grade 2 & 3 < 50 % invasion- 5-9% pelvic, 4% PA
- Grade 2, 3 > 50% invasion- 20-60% pelvic & 20% PA

ASTECC Trial Design

Endometrial cancer, thought pre-operatively to be confined to the corpus

RANDOMISE

TAH/BSO

TAH/BSO + **ND**

High risk pathology and no macroscopic disease

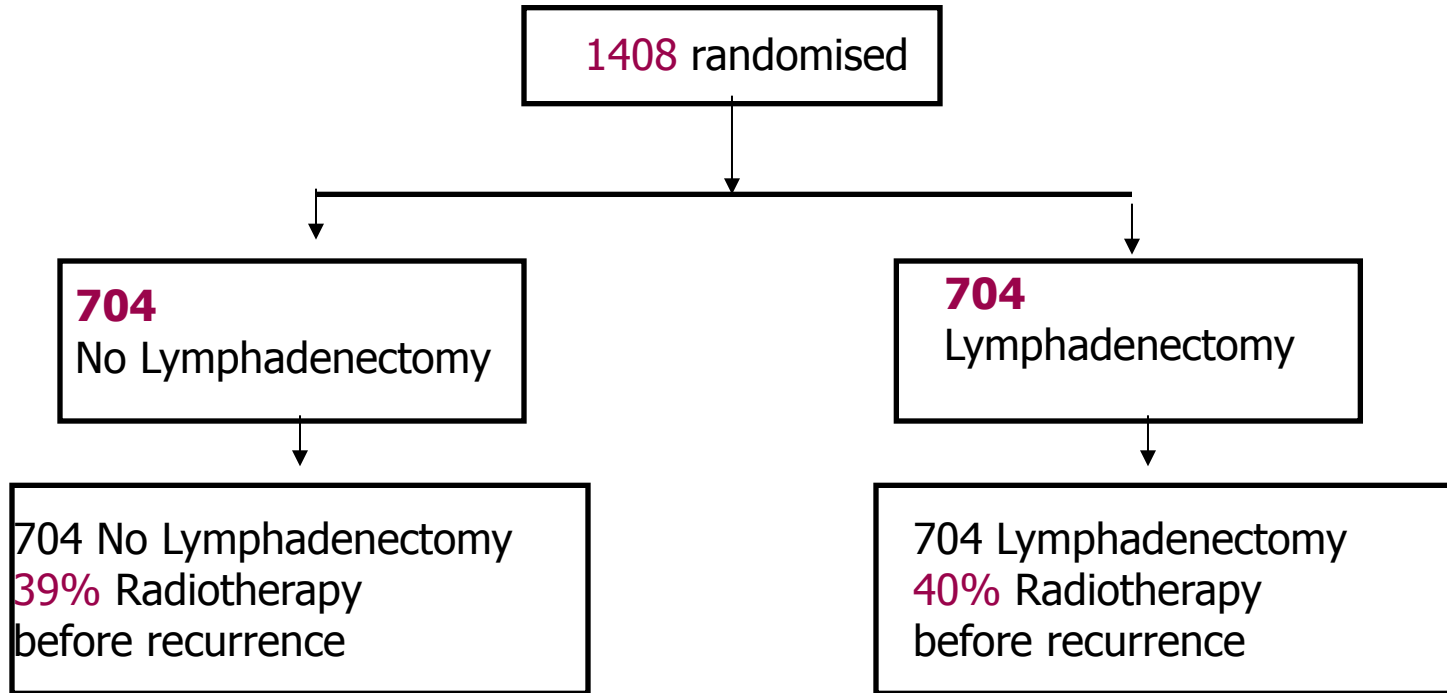
RANDOMISE

Independent of
lymph node status

No external
beam RT

External beam
RT

Surgery Trial Profile



97% of women were recruited from the UK

Conclusions of ASTEC surgical trial & Implications

- No evidence that lymphadenectomy improves overall survival or disease specific survival
- Trend for recurrence free survival to be poorer in lymphadenectomy patients
- Lymphoedema greater in lymphadenectomy
- Only role of lymphadenectomy appears to be for surgical staging

Criticism of ASTEC

- Low LN counts
- Difference in baseline of 2 groups
- Radiotherapy use affects results
- Large number of Low risk cases

Other Studies

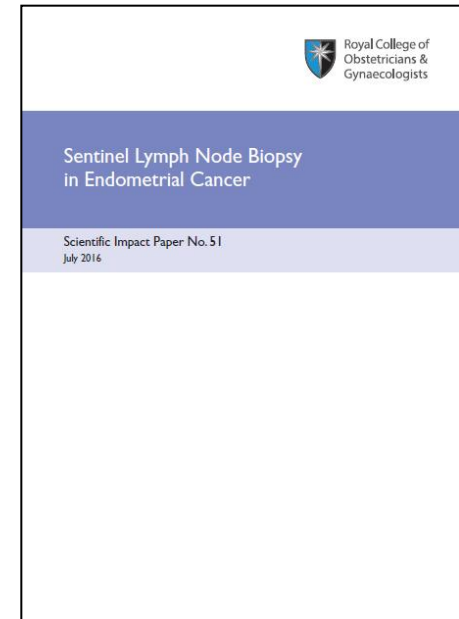
- Retrospective
- Chan et al- 12,333 patients- Found improved survival in lymphadenectomy group in 1B, G3 and above

What should we do??

- Low risk- No Lymphadenectomy
- Intermediate risk- Pelvic Lymphadenectomy
- High Risk- Pelvic + PA nodes?

Sentinel Lymph Nodes

- Inject Cx
 - Blue Dye
 - Technetium- 99
- Reduce Morbidity
- Identify PA nodes
- Watch this space!!



Route

- Open- Standard previously
- Laparoscopic
 - LAVH
 - LH
 - TLH
 - LRH
- Vaginal- Maybe for High BMI

History of Laparoscopic hysterectomy

- First laparoscopic hysterectomies
 - LAVH, Reich, 1989
 - TLH, Reich, 1993 (22 years ago!)
 - First series of around 200 cases, Chapron, 1997
 - First TLH Derby 2008- Now personal series 450

Reich, H, DeCaprio, J, McGlynn, F.
Laparoscopic hysterectomy. J Gynecol Surg
1989; 5:213.

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Benefits

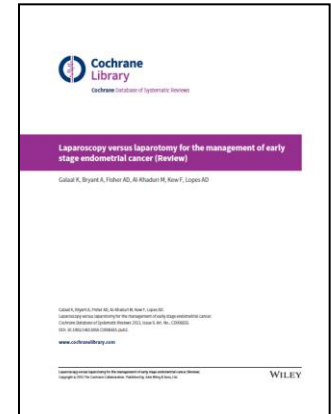
- Shorter hospital stay
- Less pain relief
- Quicker return to normal activities
- Reduced short and medium term morbidity
 - Infection
 - Thrombosis
- Fewer long term effects
 - Scar
 - Adhesions
- Cost Effective (Hidden costs of morbidity / earlier return to work)

Risks

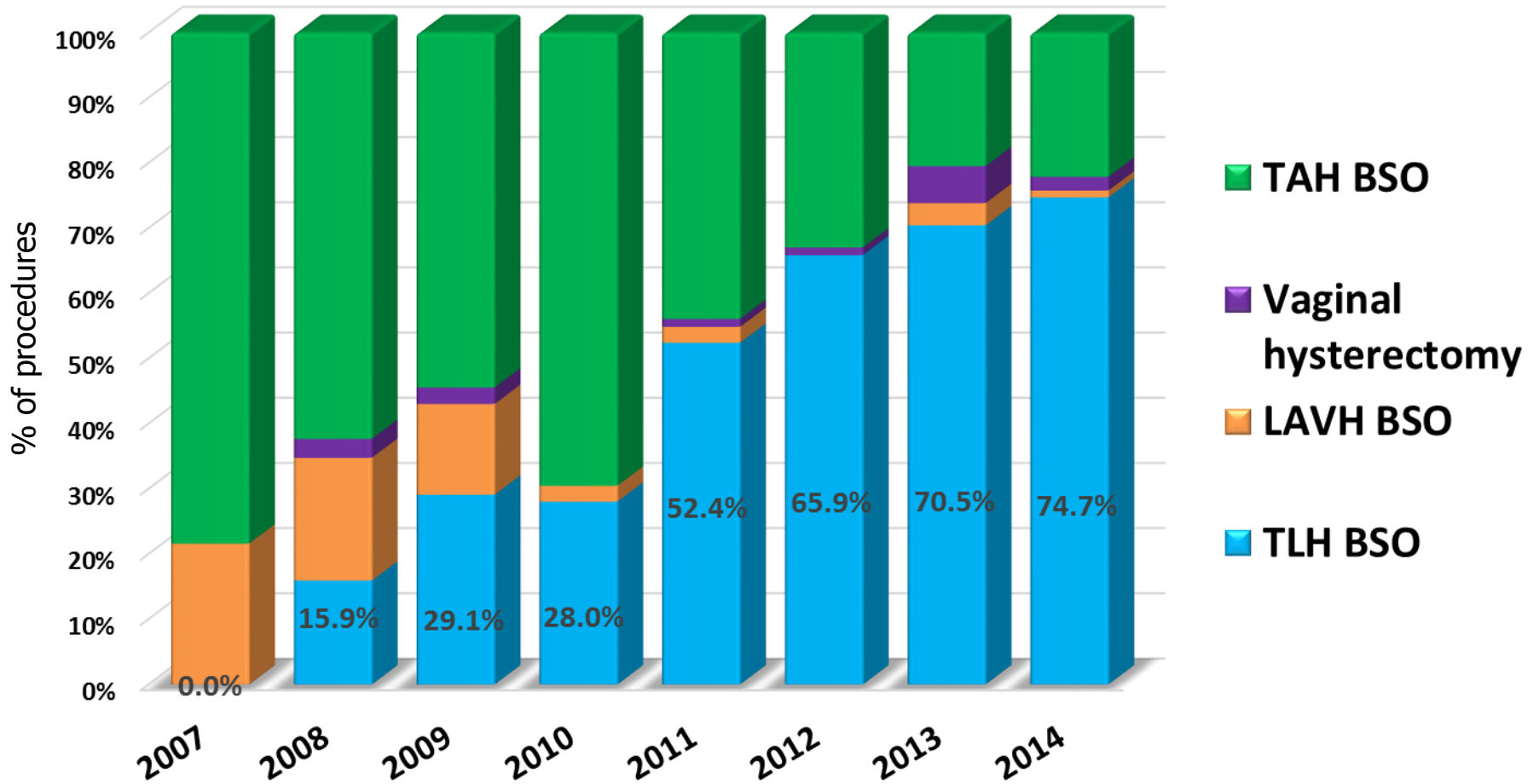
- Increased operating time
- Training required
- Learning curve more difficult
- Hand – Eye co-ordination
- Consumables more expensive
- 2D image
- Operator fatigue

The evidence

- Cochrane review
 - Shorter postop complications, Hospital stay
 - Longer operating time
 - No Difference in survival
- Hysterectomy + BSO + PLN + PA ND
- 74% had completion procedure lap



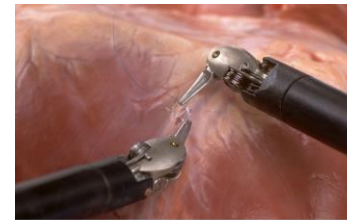
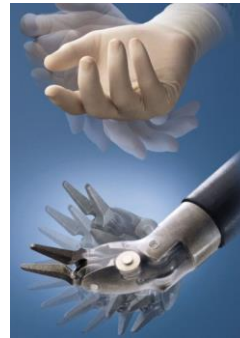
Changing surgical management



TLH Video

Robotic surgery

- Review BJOG Jan 2009
- 1985 – stereotactic brain biopsy
- 1997 – Tubal anastamosis



Robotic Surgery

- Advantages
 - Camera stability
 - Improved dexterity
 - Better ergonomics
 - Eliminate tremor
 - Eliminate fulcrum effect
- Disadvantages
 - High costs
 - Bulky – difficult to access patient
 - No tactile feedback
 - Surgeon separation
 - New technology

Robotic vs laparoscopic

- Robotic surgery
 - Less blood loss
 - Fewer conversion to open surgery
 - Less access to para-aortic LNs
 - Less cost effective
 - More port sites
 - Diathermy vs Advanced energy devices

Advanced disease

- No agreed standard Rx
- 15% women have extra-uterine disease
- Median survival
 - Optimal debulked < 2cm- 31months
 - Suboptimal – 12months
 - No debulking- 3 months
- Use of neoadjuvant Rx being investigated

Recurrent disease

- Radiotherapy if None previously
- Exenetration- for central isolated recurrence
- Optimal debulking improves survival (43 vs 10 months)

Awtery et al, Gynae Oncology, 2006
Bristow et al, Gynae oncology 2006
Arlin et al , Gynae Oncology, 2010

Derby practice

- All cases discussed at MDT
- MRI on all
- Laparoscopic management unless indication against
- TLH + BSO +/- PLND
- More radical surgery for advanced disease

Derby Practice

- Laparoscopic management standard for all patients
- 2017 >85% cases managed laparoscopically
- Procedures include
 - TLH / LAVH/ LRH
 - Lap PLND/ PA LND
 - Lap Omentectomy

Summary

- Management of endometrial cancer has evolved
 - Individualised treatment
 - MDT
 - Laparoscopic management standard
 - More radical surgery for advanced disease
 - Role of lymphadenectomy- Individualised
 - Setinel Lymph Node Biopsy