Introduction to the Surgical Management of Cervical Cancer

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Wilhelm Alexander Freund 1878



Early Development of vaginal approach for cancer of cervix

Czech Pawlik

- 1880 1st simple vaginal hysterectomy for cancer of the cervix
- 1889 Reported 3 radical hysterectomies for cancer of the cervix

Johns Hopkins Hospital 1895



TYPES OF HYSTERECTOMY



Ernst Wertheim 1898



Wertheims published results:

- 1905 Reported outcomes on his first 270 patients
 - Operatively mortality 18%
 - Major Morbidity31%
 - First year mortality 40%
- 1912 Reported on his first 500 cases
 - Operability rate50%Mortality rate18%

42%

5 year survival





Schauta 1901



Schauta's results

Operability rate	49 %
Mortality Rate	11%
5 year survival	40%

Operative mortality10%Intra-op bowel/bladder injury rate11%

Joe Vincent Meigs - 1950s



Meigs' Results

Results from 100 patients

Operative Mortality 5 year survival Stage 1 Stage 2

0%

81%

62%

Georgios Papanikolaou 1928



History of the Smear Test

• 1943 Papanikolaou along with Dr Herbert Traut

Published "Diagnosis of uterine cancer by the vaginal smear"

Cervical screening in the UK

• 1964 haphazard way

• Mid 1980's National screening programme Call and recall system

MICROSCOPIC CERVICAL CANCER



1990's Surgical Treatment of cancer of the cervix

1A1 Cone Biopsy /LLETZ
1A2 RHLND (modified)
1B1 RHLND
Some 1B2 / 2A

Central Recurrent Ca Cervix - Pelvic Exenteration

Daniel Dargent 1994



Radical trachelectomy



Radical Trachelectomy



Radical trachelectomy

• 1994 Dargent Radical Vaginal Trachelectomy

- Laparoscopic lymph nodes
- Extraperitoneal lymph nodes

• 1997 Abdominal Radical trachelectomy & nodes

• 2003 Laparoscopic trachelectomy & nodes

Standard Surgical treatment of cervical cancer today

- 1A1 LLETZ
- 1A2 Modified RHLND
 - RTr + LN
- 1B1 RHLND
 - RT + LN
- 1B2 RHLND / ChemoRT

Cervical Cancer (C53): 2002-2006 Five-Year Relative Survival (%) by Stage, Adults Aged 15-99, Former Anglia Cancer Network



Please include the citation provided in our Frequently Asked Questions when reproducing this chart: http://info.cancerresearchuk.org/cancerstats/faqs/#How Note: Relative survival can be greater than 100% because it accounts for background mortality. A relative survival figure greater than 100 indicates that people diagnosed have a better chance of surviving one (five) year(s) after diagnosis than the general population.

Prepared by Cancer Research UK Original data source: The National Cancer Registration Service, Eastern Office, Personal communication http://ecric.org.uk/



Complications of Radical Surgery

Bladder dysfunction

Lymphoedema of legs

SHAPE TRIAL

A RANDOMIZED TRIAL COMPARING RADICAL HYSTERECTOMY AND PELVIC NODE DISSECTION VS SIMPLE HYSTERECTOMY AND PELVIC NODE DISSECTION IN PATIENTS WITH LOW RISK EARLY STAGE CERVICAL CANCER

A Gynecologic Cancer Intergroup (GCIG) Trial led by the NCIC CTG

GCIG Trial Designation: The SHAPE Trial NCIC CTG Protocol Number: CX.5

SHAPE Trial

- Background Considerable variation exists in international practices
- Lack of high-quality evidence upon which clinicians can base their decisions and advise women
- Need to standardize treatments and a need to identify the patient and disease for which a less radical surgery can safely be offered
- In the context of "survivorship" issues related to longterm surgical effects:
- Compromised sexual, bowel and bladder function Infertility

SHAPE TRIAL

• Definition

- Low-risk » early-stage cervical cancer
- • IA2
- • IB1 < 2 cm
- Limited stromal invasion < 10 mm SI on LEEP/cone
 <50% SI on pelvic MRI

SIMPLE HYSTERECTOMY



RADICAL HYSTERECTOMY



Pelvic sentinel node



Conclusions - surgical management carcinoma cervix

- It all started nearly 140 years ago
- The Wertheim / Schauta techniques are the basis of all our radical surgery
- Cervical screening has lead to us diagnosing cancer much earlier
- Next challenge is how much less radical can we be safely in early cancer of cervix