Conservative Management of Stage IA Cervical Cancer: Outcomes following Loop Excision as a Fertility Sparing Policy with Critical Emphasis on Margin Status

P Korompelis[1], S Rundle[1], M Adishesh[1],
R O'Donnell[1,2], R Naik[1],

1. Northern Gynaecological Oncology Centre, Queen Elizabeth Hospital, Gateshead
3. Northern Institute for Cancer Research, Newcastle University, Newcastle-upon-Tyne

Introduction

- More than 3000 cases of cervical cancer are diagnosed annually in the UK, 57% of which are stage 1A [1,2].
- Focus on conservative management has grown and has been adopted by many UK centres.
- Uncertainty remains regarding:
  - Radical treatment of 1A2 disease
  - Lymphadenectomy in LVSI positive cases
  - Reflex hysterectomy as primary treatment
  - Delayed hysterectomy after fertility completion.
- We present the largest published series of a conservative treatment policy in stage IA cervical cancer.

Methods

- **REGIONAL PRACTICE**: diagnostic conization or LLETZ followed by repeat LLETZ , (hysterectomy for patient choice or if LLETZ not feasible). Pelvic lymphadenectomy in 1A2 disease only.
- Regional MDT and pathology databases were cross referenced with the National Cancer Registry and Death Registry UK to identify all cases of FIGO Stage 1A1 and 1A2 cervical cancer 2006-2016 within the North of England (serving a population of 1.6 million women).
- All cases underwent central pathology review.
- Clinicopathological data alongside demographics were collated alongside detailed follow-up cytology and colposcopy results in conjunction with primary care.

Objectives

Primary objectives: 1) determine the uptake of conservative approach in Stage 1A disease; **2)** determine the rate of recurrence of pre-invasive and invasive disease. **Secondary objectives: 3)** determine feasibility and adherence with cytology ad colposcopy based follow-up in this cohort; **4)** determine rate of delayed hysterectomy and establish indications for this.

Results

- The incidence of FIGO Stage 1A cervical cancer in the North of England region was 15/100,000 women.
- Of the 247 patients diagnosed, median age was 32.9 years (23 – 79). Patient demographics are shown in Table 1.
- 240 (97.2%) of cancers were detected through the NHS cervical cancer screening programme.

Table 1: Patient demographics

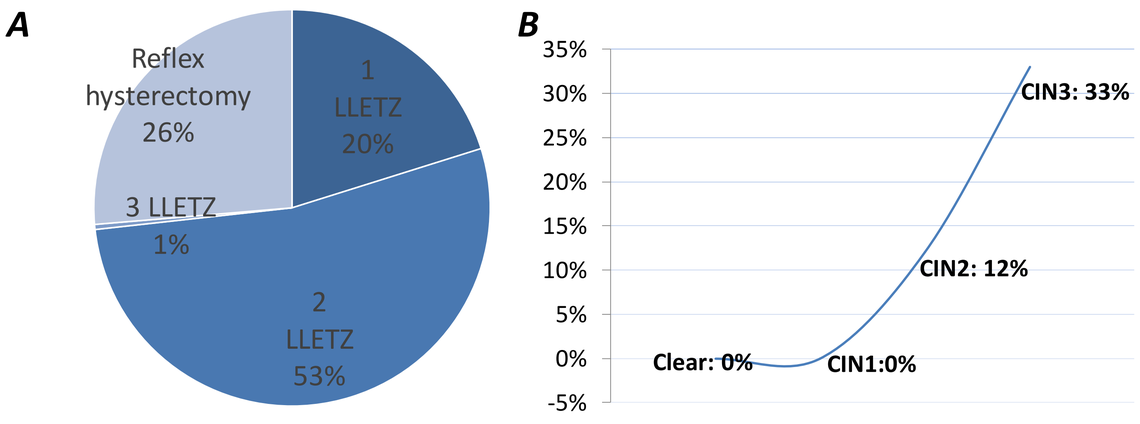
	FIGO Stage 1A1 n=232	FIGO Stage 1A2 n=15	All n=247
Age (median, range)	33.0 (23-79)	33.3 (24-63)	32.9 (23-79)
Parity			
Nulliparous (fertility desire)	54 (23%)	9 (60%)	63 (26%)
Parous (fertility desire)	116 (50%)	2 (13%)	118 (48%)
Family complete	62 (27%)	4 (27%)	66 (27%)
Histology			
SCC	207 (89%)	12 (86%)	219 (89%)
Adenocarcinoma	23 (10%)	2 (14%)	25 (10%)
Other	2 (1%)	0 (0%)	2 (1%)
LVSI			
Present	8 (3%)	5 (33%)	13 (5%)
Absent	209 (91%)	10 (67%)	219 (89%)
Unknown	15 (6%)	0 (0%)	15 (6%)
Referral cytology			
Invasion	22 (11%)	1 (7%)	23 (9%)
High grade (severe)	186 (85%)	12 (93%)	198 (80%)
High grade (moderate)	10 (5%)	0 (0)	10 (4%)
Low grade (HRHPV +)	9 (4%)	0 (0)	9 (4%)
Normal	1 (0.4%)	0 (0)	1 (0.5%)
No cytology**	4 (2%)	2 (13%)	6 (2%)

*** occult cancer diagnosed after hysterectomy for benign indications.*

Diagnosis:

- 4 occult cases at hysterectomy, remaining 243 loop diagnoses,
- 53/243 (22%) had complete excision of invasive and pre-invasive disease after diagnostic LLETZ; 28/243 (11%) had incomplete excision of invasive disease; 162/243(67%) had incomplete excision of pre-invasive disease.
- 49 (20%) and 129 (53%) underwent treatment with one and two LLETZ respectively. 1 (0.25%) patient underwent 3 LLETZ, whilst 64 (27%) elected to undergo reflex hysterectomy., Figure 1A.
- 7% underwent BPND (0/17 positive nodes).

Figure 1: A) Primary treatment; B) Risk of recurrence pre-invasive disease by LLETZ margin



- Recurrence rate (RR) for invasive disease was 2/247 (0.8%) with no deaths (median follow-up 46 months).
- RR of CIN was 8/247 (3%).
- RR increased with grade of CIN at resection margin, Figure 1B, ($p<0.05$)
- 13/177 (7%) patients underwent delayed hysterectomy. Indications included:
  - Abnormal/inadequate smears 9/13
  - Complete family 4/13

Recurrence cases

Case 1: Stage 1A1, LVSI absent. Treated with hysterectomy, CIN3 ar vaginal margin. Case 2: Stage 1A1, LVSI absent. Treated with LLETZ, with CIN3 at the ectocervical margin.

RR of invasive disease following hysterectomy: 1.4%; RR of invasive disease following LLETZ: 0.6%, ($p=0.85$).

Conclusions

- Regional incidence: 15/ 100,000
- RR invasive disease: 0.8%
- RR CIN: 3%
- Reflex and delayed hysterectomy rates: 27% and 7%
- **Irrespective of treatment with LLETZ or hysterectomy, margin status defines the risk of recurrence.**