An Audit of the Standard of Surgical Treatment of Early Cervical Cancer

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Background:
Cervical cancer is the fourth most prevalent cancer in women and has the fourth highest cancer mortality rate. The quality of surgical care as a component of comprehensive multi-disciplinary management has been shown to improve outcomes in patients with other types of malignancies. As surgical treatment is the mainstay of early-stage cervical cancer, the European Society of Gynaecological-Oncology (ESGO) has developed a set of quality indicators to ensure that women receive high-quality, evidence-based surgical treatment, with the aim to improve survival rates of patients with cervical cancer.

Methods:
Ethical approval: 2101-05 QA
This audit evaluated the current surgical management of cervical cancer at Westmead Gynaecology-Oncology Department (WGOD) over 10 year's (1/1/2011-31/12/2020) against the current ESGO standards of care.

Results:
There were 420 women treated for cervical cancer in this timeframe, 225 were surgical candidates and 210 were included in this study (15 patients were excluded due to lack of available data). Graph 1 shows the distribution of cases over the 10 years audited.

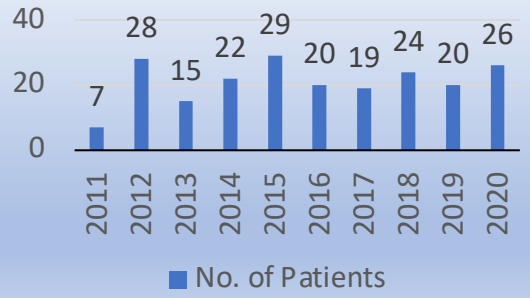
The table shows the ESGO QIs and standard with the results from the Westmead hospital (WMH) data.

Discussion:
Areas where ESGO recommendations were met were case numbers, clinical trials, follow-up, urological fistula rates, recurrence rates and fertility sparing procedures. Areas for improvement were appropriate pre-operative investigation (WGOD 51.5%, ESGO standard 100%) and patients upstaged post operatively (WGOD 16%, ESGO standard ≤10%).

ESGO QI	Standard	WMH data
1. Structural Indicator: Number of radical procedures (parametrectomies) in cervical cancer performed per centre per year	≥ 15	~20
2. Process Indicator: Surgery performed or supervised by a certified gynaecologic oncologist or a trained surgeon dedicated to gynaecological cancer.	100%	98% (3/210. Performed by general gynaecologist. These patients were 1A1).
3. Structural Indicator: Centre participating in ongoing clinical trials in gynaecological cancer	≥1	2 trials
4. Treatment discussed at a multi-disciplinary team meeting.	100%	98.6% (3/210 patients who did not require ongoing treatment).
5. Required Pre-Operative Investigation	100%	51.5% (104/210 patients had no pre-operative investigations).
6. Minimum required elements in surgical reports	100%	N/A*
7. Minimum required elements in pathology and pathology reports	≥90%	N/A*
8. Structured prospective reporting of the follow-up and 30-day post-operative morbidity	≥90%	100%
9. Urological fistula rate within 30-post-operative days after a radical parametrectomy	≤3%	0.5%
10. Proportion of patients after primary surgical treatment who have clear vaginal (invasive disease) and parametrial margins.	≥97%	95.76% (116 patients had radical hysterectomy and 5 had positive margins)
11. Proportion of patients with a stage T1b disease T-upstaged after surgery	≤10%	16% (17/106 patients)
12 Recurrence rate at 2 years in patients with a stage pT1b1 with negative lymph nodes (LNs) after primary surgical treatment	≤10%	1.2%
13. Proportion of patients with a stage T1 disease treated by primary surgery who have undergone lymph node (LN) staging according to the ESGO-ESTRO-ESP guidelines	≥98%	95% (114/120 patients)
14 Counselling about a possibility of FST .	100%	100%
15. Proportion of patients receiving adjuvant chemoradiotherapy after a primary surgical treatment for a stage pT1b1 pN0 disease.	<15%	18% (12/66 patients)

*These are 2 new quality indicators still in development .

Graph 1: Number of patients with cervical cancer undergoing surgical treatment.



Conclusion:
These findings have highlighted areas for improvement, specifically pre-operative investigations. We postulate this could lead to reducing those patients upstaged post operatively. By following the ESGO quality indicators, healthcare providers can ensure that women with cervical cancer receive optimal surgical care, leading to improved outcomes and reduced morbidity and mortality.

References:
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