

Single site audit of effectiveness of Sentinel Lymph Node Biopsy in Endometrial Cancer in Gynaecological Oncology Practice

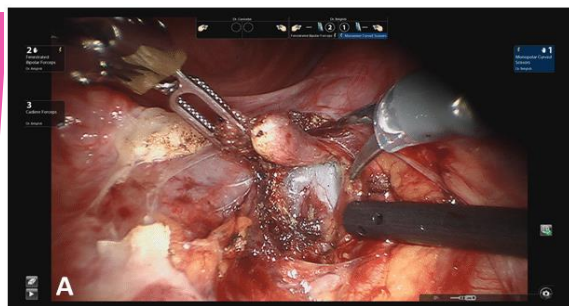
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INTRODUCTION

Endometrial cancer (EC) is the 5th most common cancer and the most common gynaecological cancer in Australia [1]. Sentinel lymph node biopsy (SLNB) is rapidly becoming the preferred method for staging EC due to decreased morbidity and mortality [2]. The purpose of our audit is to compare SLNB within a tertiary centre in Australia to the gold standard of an 80% overall detection rate of lymph node metastasis [3]. It will also allow us to assess for improvement in SLNB over the years.

METHOD

The data was collected retrospectively using a modified assessment tool [3]. Our inclusion criteria were women ≥ 18 years of age diagnosed with EC who have been consented for Indocyanine green between 08 August 2017 to 31 December 2019 and treated at a tertiary hospital in Australia. Of 165 women eligible for this audit, 155 met the inclusion criteria.



RESULTS

Of the 155 patients that met the inclusion criteria - 128 public and 27 private. Private patients were excluded as majority of their data could not be collected due to limited accessibility to documentation. Of the public patients, a total of 19 patients were excluded for various reasons. 7 were excluded for insufficient information in the documentation, 2 were excluded as their primary cancer was cervical and 10 were excluded as ICG was not injected. Of the remaining 109 cases, 83 had SLN detected and removed and 22 of these had PLND. Of the 83 cases who had SLNs removed, 62 mapped bilaterally whilst 21 mapped only unilaterally. 4 of those SLNs mapped tested positive for metastasis whilst 1 case tested falsely negative. This gave the SLN biopsy a sensitivity of 80% and a specificity of 100%. The detection rate was 76%.

DISCUSSION

The table below compares current gold standard against our practice and the audit's findings. Our results did not meet the targets in areas of sensitivity and overall detection rate. This is likely due to the low number of patients in who SLNB and PLND were done. This does not suggest ineffectiveness in SLN sampling but rather explores the need for more data as well as detailed protocols to be used intra-operatively during these operations, to allow more standardized sampling and collection.

Area	Target	Our practice
Sensitivity	$\geq 90\%$	80%
Negative predictive value	$>95\%$	99%
Overall detection rate	$>80\%$	76%
False negative rate	$<5\%$	0%

CONCLUSION

SLNB is quickly becoming the most accurate method of staging endometrial cancers [2]. The findings of our audit suggest our practice is in part comparable to the gold standard. Re-auditing will allow the opportunity to compare future data to monitor for ongoing improvement in our technique and further understanding of SLNB.

References

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2. Society of Gynecologic Oncology. (2015). *SGO Clinical Practice Statement: The role of sentinel lymph node mapping in endometrial cancer*. Retrieved from <https://www.sgo.org/clinical-practice/guidelines/the-role-of-sentinel-lymph-node-mapping-in-endometrial-cancer/>
3. Cormier, B., Rozenholic, A.T., Gotlieb, W., Plante, M., Giede, C. (2015). Sentinel lymph node procedure in endometrial cancer: A systematic review and proposal for standardization of future research. *Gynecologic Oncology*. 138(2): 478-85.