

ASSESSING THE ACCURACY OF RADIOLOGY IMAGING IN IDENTIFYING OVARIAN CYST NATURE

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INTRODUCTION

10% of women will undergo surgery for an ovarian mass during their lifetime. Accurate diagnosis is crucial to avoid unnecessary surgeries and associated risks. The International Ovarian Tumour Analysis (IOTA) ultrasound study has sensitivity of 95% and a specificity of 91%. Ultrasound should be the initial diagnostic tool for characterizing ovarian masses, guiding management decisions between conservative approaches and surgical intervention, thereby reducing unnecessary surgeries and associated risks.

DESIGN

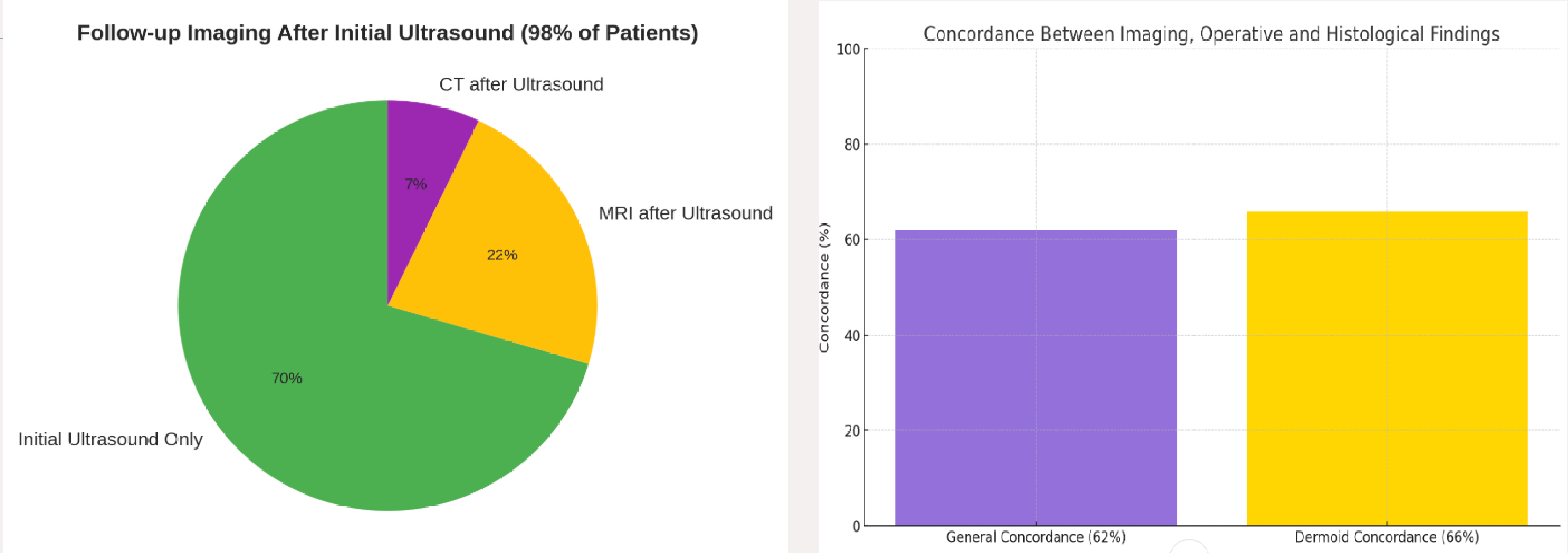
This retrospective audit was conducted at Darent Valley Hospital to evaluate the accuracy of preoperative ultrasound in diagnosing ovarian cysts and compared findings to standards from the Getting It Right First Time (GIRFT) national initiative. The study reviewed patient outcomes to assess the correlation between pre-operative imaging, surgical findings, and histology.

RESULTS

- Of the 99 women, 92 underwent elective surgery and 7 required emergency surgery.
- Laparoscopic surgery was performed in 89% while 13% required laparotomy.
- 85% of patients were discharged within 24 hours post-elective surgery. The median length of stay for emergency ovarian surgery was 3 days, exceeding the GIRFT benchmark of 2 days, primarily due to postoperative pain
- 98% of the cases had ultrasound as initial imaging. Additional imaging required in 22% (MRI) and 7% (CT scan) for complex ovarian cysts identified by ultrasound.
- In 62% operative documentation matched imaging findings (size and septae). Dermoid cysts showed 66% concordance between ultrasound, operative, and histological descriptions.
- 30% of the patients underwent salpingo-oophorectomy, with 53% of these women being postmenopausal.

METHODOLOGY

This audit included 99 patients who underwent ovarian cyst surgery from January to August 2022. Patient list was provided by theatre administrator. Data was collected from electronic patient records, including clinic letters, operation notes and histology reports.



CONCLUSION

Our audit shows that ultrasound demonstrates strong concordance with operative and histology findings, particularly in dermoid cysts. This supports ultrasound as an effective first-line imaging modality for diagnosing ovarian cysts, particularly when following IOTA guidelines, in guiding accurate diagnosis and informed clinical management.

References:

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