

The Management of Incidental Adrenal Lesions Detected on Imaging

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Introduction

Adrenal incidentalomas are defined as masses greater than 1cm detected on imaging exams not performed for suspected adrenal disease. With advancements in imaging technology, their increased use and an aging population, the number of reported adrenal incidentalomas are on the rise. Although they are usually benign, a small portion are functioning, indeterminate or malignant and not many trusts have set guidelines to advise on the management of these common incidentalomas. Therefore, creating local guidelines would be particularly useful to standardise management and improve patient outcome.

Methodology

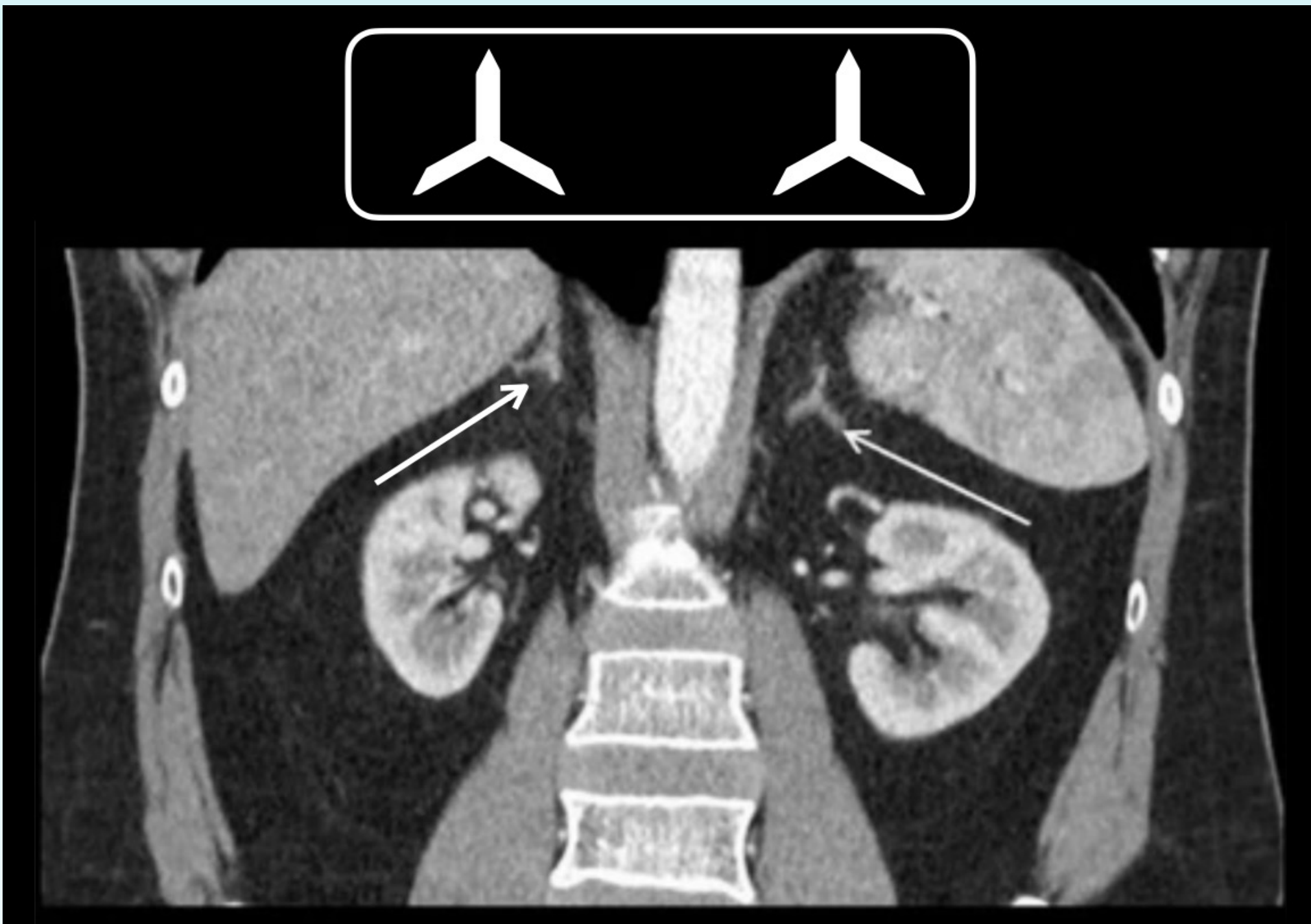
In 2021, a retrospective study reviewing abdominal CT and MRI reports within the last year that included key words surrounding adrenal incidentalomas was completed to assess reported recommendations by radiologists. Exclusion criteria included duplicates and those with no identified incidental adrenal lesions. Following this, we created local departmental guidelines with influence from the American College of Radiology, the European Society of Endocrinology and the European Network for the Study of Adrenal Tumours. This newly created trust guideline was implemented with the involvement and support of the trusts Urologists and Endocrinologists. The guideline was presented to the radiology department to standardise recommendation provided on imaging reports.

Two years following the guidelines implementation at Arrowe Park Hospital, the second cycle of the audit was completed in 2023 to assess compliance using the same method of retrospective data collection.

Results

- First cycle
- Over 600 scan reports were reviewed, with 260 scans included in the cycle.
 - 177/260 (68%) of reports included measurements.
 - 44/260 (17%) of these reports followed the proposed trust guidelines, with little consistency in advice on how to manage adrenal incidentalomas. There was large variation in follow up imaging modality, timing and specialty referrals.

- Second cycle
- Over 2000 scan reports were reviewed after the implementation of the new trust guidelines, and after removing exclusions, 226 patients with newly identified incidental adrenal lesions were included.
 - 158/226 (70%) of reports included measurements.
 - 210/226 (93%) of these reports correctly followed the new trust guidelines, and around half of these reports also provided advice on the need for follow up imaging modality with time frame and/or specialty referral.



Appearance of normal adrenal glands on CT imaging

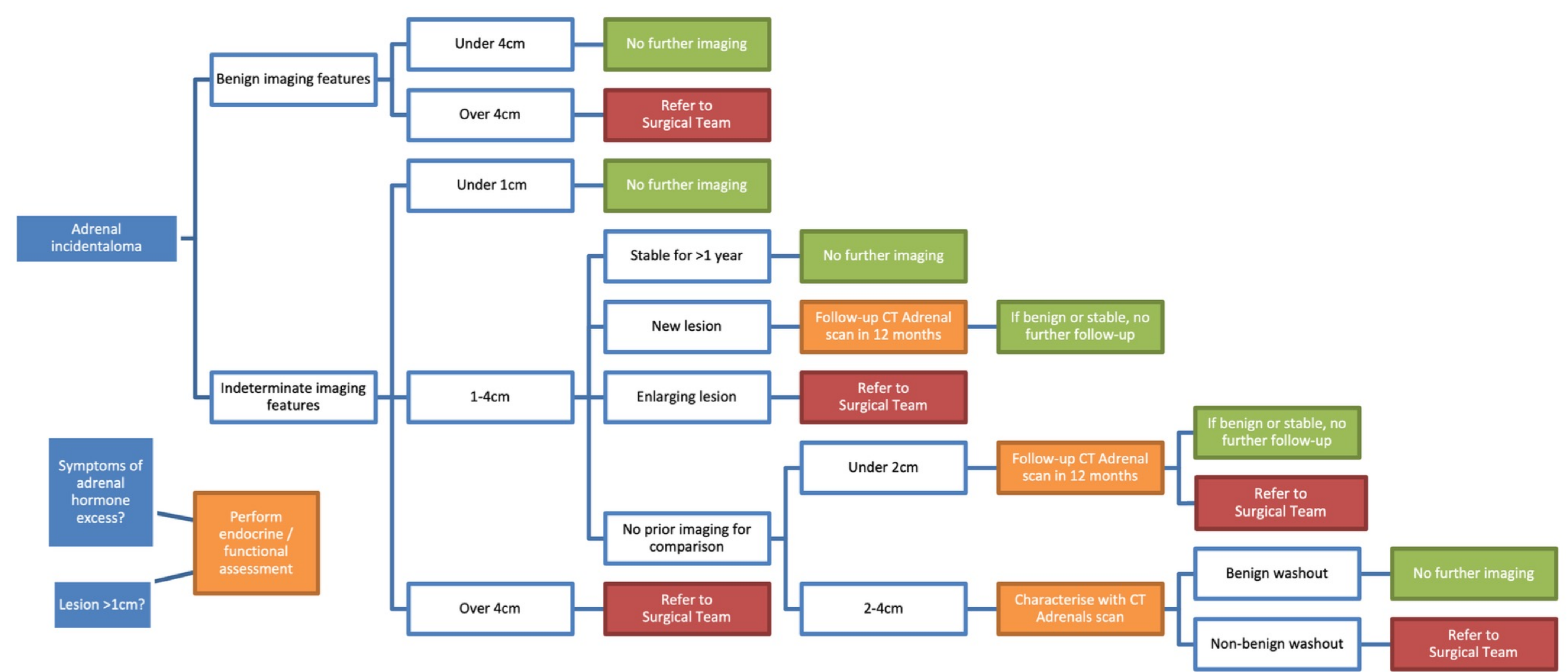
Conclusion

The creation of a local trust guideline on the management of adrenal incidentalomas has significantly improved the consistency in advice, allowing for better standardisation of care, and the improved ability to prioritise patient safety. Including the guidelines within the report allows requesting clinicians to understand the recommendation radiologists provide.

References

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Arrowe Park Hospital's management pathway for incidental adrenal lesions detected on imaging