

INTRODUCTION:

The American College of Radiology (ACR) in 2017 published guidelines including an algorithm for adrenal incidentaloma follow up (FU). Although elements of this algorithm were included in our centre's imaging follow up protocol, lack of awareness of this meant that the guidelines were not being fully implemented. We aim to assess local practice and make recommendations to streamline the follow up process.

A document by the Royal College of Radiologists (RCR) sets out recommendations for cross-sectional imaging in patients with renal or adrenocortical cancer, but we have not found guidance with regards to patients without a history of cancer.

METHODS:

To assess local practice, data for 100 patients who underwent CT of the adrenal glands (CADRB) in the year 2022 was analysed. The parameters examined included the reason for the adrenal imaging, if the lesion had benign or malignant characteristics as described in the ACR guidelines published in 2017 and if patient had undergone any previous or interim studies, which had reported the adrenal lesion. We also looked at if the initial scan which triggered the CADRB had reported size measurements of the nodules.

RESULTS:

Of the 100 CT adrenal (CADRB) performed in our hospital in 2022, 82 were triggered by previous imaging and 18 were performed to look for primary adrenal pathology (i.e. not triggered by imaging) and as such they were excluded from the study.

82 CADRB		
Benign	79	
Not benign	3	2 indeterminate 1 metastasis

Table 1. Benign vs non-benign pathology on FU studies

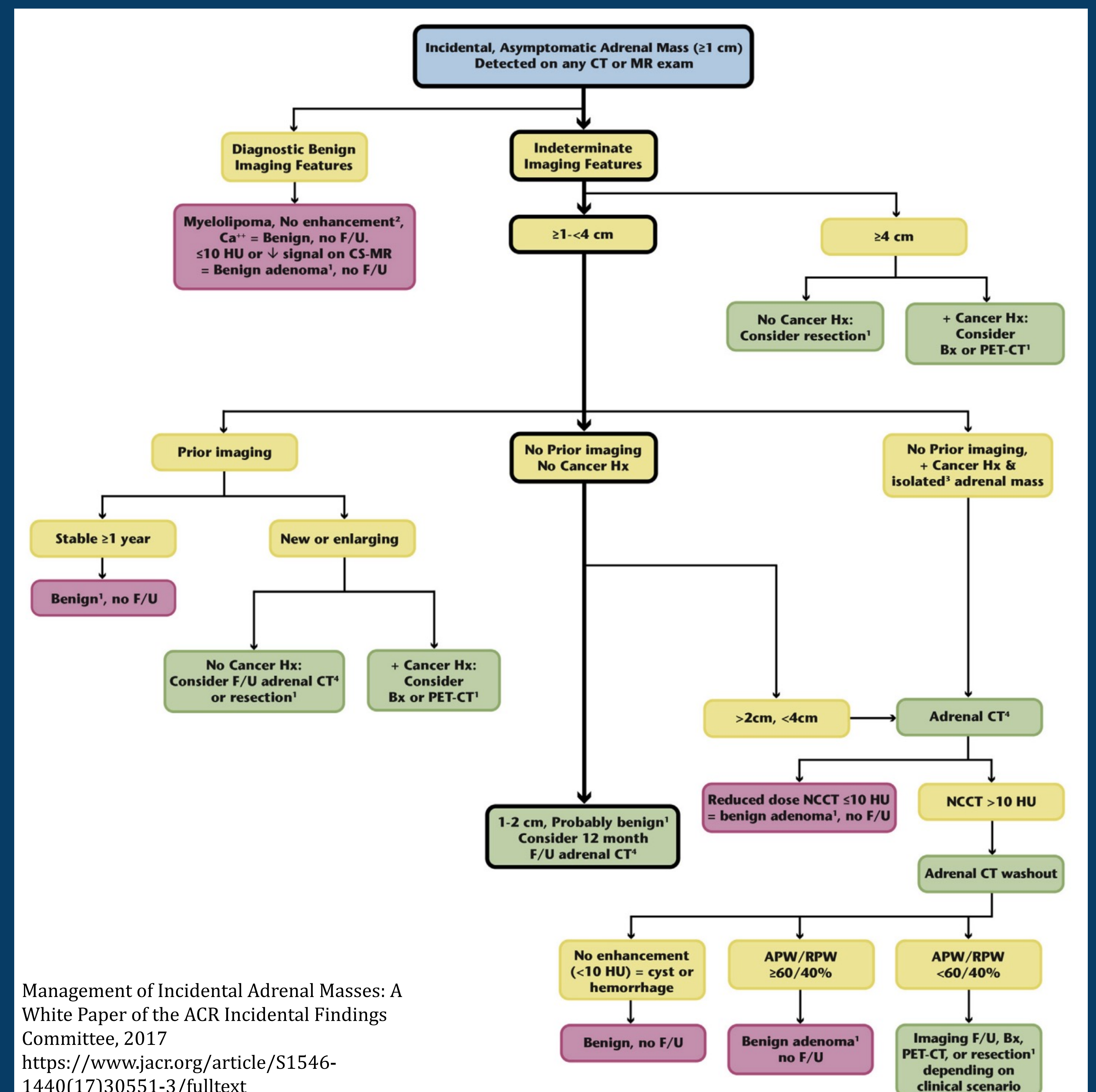
82 CADRB		
Size reported a size (on initial study)	52	36 (1-2 cm)
		16 (>2-4cm)
No size reported	30	

Table 2. Reporting of lesion size on initial studies

79 benign lesions (on FU)	
Reported as benign on initial study	13
Reported as benign on prior or interim study	13

Table 3. Demonstrating the number of prior or interim studies which demonstrated a benign lesion.

Comparing our results to the ACR algorithm means that *at least 32%* of the FU studies (table 3) could have been avoided.



CONCLUSION:

There appears to be a lack of awareness of the ACR guidelines, which impacts follow up imaging and workload. We aim to create a simplified local algorithm and by implementing this, we hope to reduce unnecessary radiation exposure and the departmental workload.

We plan to re-assess practice after the local algorithm has been created and disseminated.

RECOMMENDATIONS:

We should raise awareness of these guidelines by creating an algorithm which would be suitable for local practice and disseminate this within the department and to our clinical colleagues across the trust.

To our colleagues in the radiology department, we make the following recommendations:

When vetting the CADRB:

- Look for prior and interim imaging, which may answer the clinical question.
- If being vetted by radiographers, the request should be checked with a radiologist, if unsure.
- When giving follow up appointments, follow the algorithm to ensure they are within the appropriate time interval.

When reporting a scan:

- Always look for prior imaging when there is an adrenal lesion.
- If there are no prior images, to help with decision making for follow up, measure the size of the lesion and follow the algorithm.