

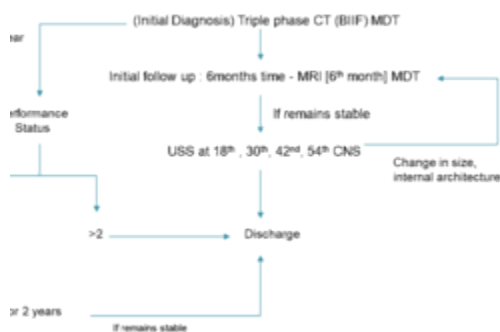
Chari N.C.¹, Charitopoulos K.², Davidson R.²

¹West Middlesex University Hospital , Chelsea and Westminster NHS Trust, Dept. of Urology, London, United Kingdom, ²West Middlesex University Hospital , Chelsea and Westminster NHS Trust, Dept. of Urology, London, Afghanistan

Introduction & Objectives: The Bosniak classification system has five simple categories based on imaging characteristics on contrast-enhanced CT. Bosniak IIF (BIIF) has to be closely monitored and requires periodic imaging to rule out risks of malignancy. With improved imaging quality, the balance between radiation exposure and interval follow up of BIIF is established. The average malignant risk for BIIF is up to 5%. A protocol established incorporates the sensitivity of imaging, radiation exposure and patient management. There are none established guidelines for BIIF cyst follow up.

Materials & Methods: A retrospective study performed on a total of 35 patients diagnosed with BIIF. The data was collected through the District General Teaching Hospital Renal MDT database searched from September 2013 to March 2020. Patients had enhanced computed tomography; magnetic resonance imaging followed with serial ultrasound scan. The age range is 35 to 80. The protocol established for BIIF includes the first imaging/initial diagnosis to be a triple phase contrast enhanced CT followed by MRI renal at 6th month. Ultrasound scans at 18th month, followed by yearly scan at 30th, 42nd, 54th months. If any changes seen on the interval imaging the patient's case will be re-discussed in the MDT. Performance status has been accounted in the protocol for patients more than 80 year old. With a good performance status will have an 18th and 30th month ultrasound scan and discharged if remain stable. Patients with poor performance can be discharged after the triple phase CT.

Suggested protocol



Discharge patient at 8th year . however this is subject to change depending on the individual case scenario

Results: A total of 35 patients in the audit, none of the BIIF cyst had malignant changes or required modification in imaging protocol. The sample size is small to determine the progression of BIIF cyst to have malignant changes. The total time of imaging follow up cyst is 4.5 years (54 months).

The protocol was followed for 86% of patients. This protocol has the minimum imaging required for periodic follow up. There was 8.5% (3) cysts which required upgrading in imaging but remained stable in the follow up imaging.

Conclusions: The established protocol served the purpose of adequate follow up with minimum radiation exposure. A recommendation to make this a standard protocol is suggested and an wider study is required. The aim is to discharge patients within 5 year with adequate imaging and assurance.