



MULTIFOCAL LEIOMYOMA IN A CASE OF POST RENAL TRANSPLANT

Medicine

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ABSTRACT

Multifocal leiomyoma is a rare tumor in post renal transplant patients. We had one 25 years old young male patient- post renal transplant in 2008. He was evaluated in 2010 in view of abdominal pain. On ultrasound, thick wall septate necrotic area of liver was found. Histopathological examination of that area was suggestive of smooth muscle tumor of liver. In 2016, he was evaluated in Indraprastha Apollo hospital, New delhi in view of fever, cough and generalized weakness. On further evaluation, endobronchial mass was found in right bronchus intermedius and histology was suggestive of leiomyoma. He was managed conservatively as surgery was not possible in view of multifocal tumor. Patient improved symptomatically with conservative therapy. He was discharged and kept on follow up in OPD.

KEYWORDS

INTRODUCTION-

Leiomyoma is benign soft tissue neoplasm that arises from smooth muscle. It is benign neoplasm of mesenchymal origin and is quite common in places such as the gastrointestinal and genitourinary tracts. It is comprised of well-differentiated smooth muscle cells with few mitotic figures. But malignant transformation probably does not occur. Immunosuppression is associated with the development of many smooth muscle tumours (SMT), most notably in the paediatric HIV population. Infection with Epstein-Barr virus (EBV) has also been associated with the development of this tumor after transplantation. The rarity of this tumour type in the adult population, together with its varying organ localisation and clinical behaviour, presents a challenge for both diagnosis and management [1].

Case report-

25 years old young man, non-smoker, non-alcoholic from New delhi was a known case of post renal transplant since 2008 and was on Prednisolone(20mg once daily) and other immunosuppressant medications. In April 2010, he had pain in right hypochondrium. Contrast CT abdomen was suggestive of liver abscess that was drained by pigtail catheter. Pus was positive for AFB and he was put on ATT. He had recurrence of abdominal pain after 1 month. USG abdomen was suggestive of thick wall septate necrotic area in right lobe of liver. Liver biopsy of that area was suggestive of smooth muscle tumor of liver. In March, 2012 he was admitted for respiratory distress. He was managed as right lower lobe pneumonia and improved symptomatically with treatment. In March 2016, he was admitted with complaint of high grade intermittent fever, cough with expectoration, generalized weakness for one week. On general examination- vitals were stable. On chest examination, he had decreased vesicular breath sound in right infrascapular region. Chest X-ray showed left middle-lower zone opacity [Fig-1]. HRCT thorax [Fig-2] showed collapse consolidation in left upper, lingular and right lower lobe; obstructive lesion in intermediate, middle and lower lobe bronchus; focal liver lesion. Bronchoscopy showed mass in right bronchus intermedius that occluded completely and also visible in left upper lobe bronchus [Fig.-3]. Biopsy revealed smooth muscle neoplasm. MIB-1 labelling index within tumor cells were very low (<1%). So, overall histology features favoured diagnosis of Leiomyoma. Oncology opinion was taken. Sirolimus immunomodulator therapy was planned as surgery was not possible for multifocal disease. Patient improved symptomatically with conservative treatment, discharged and kept on follow up.



Figure-1: Chest X-ray showed radio-opaque shadow mainly in left mid zone.

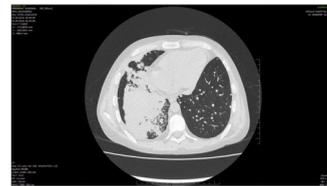


Figure-2: HRCT thorax (one cut) showed collapse consolidation in right lower lobe



Figure-3: Bronchoscopy showed mass lesion in right bronchus intermedius and left upper lobe; Biopsy was taken.

DISCUSSION-

Multifocal areas of leiomyoma in post renal transplant case are very rare entity. Previous case reports showed multifocal leiomyoma in female patients mainly whose primary site were uterus [2,3,4]. For our patient, leiomyoma involved to liver and lung. It seems to have Epstein-Barr virus associated smooth muscle tumor which has been documented in isolated case report. Most endobronchial leiomyoma reported in the literature has been resected by either lobectomy or pneumonectomy [5]. But our patient was not operated in view of multifocal disease. It is thought that bronchial leiomyoma is derived from smooth muscle layer of bronchi, bronchioles, or blood vessels [6]. Bronchial leiomyomas are cellular neoplasms, with minimal vascular or stromal fibrous component in contrast with parenchymal leiomyomas [7]. They may present as asthma or other obstructive diseases of the lung and should be kept in mind as a rare cause of asthma like symptoms especially in an adult female who is unresponsive to bronchodilators. Histological examination and immunohistochemistry provide the exact diagnosis [8].

Conclusion-

Multifocal areas of leiomyoma in post renal transplant case are very rare entity. Diagnosis is challenging. It needs imaging, bronchoscopy

and biopsy. Patient needs conservative line of therapy in view of multiple focus of involvement. Routine follow up is also needed.

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