

TMSS Medical College Journal (TMCJ)

Volume 17, No. 02, July 2021

Contents

Editorial

- ▶ DNA Sequencing: From Medicine to Personalized Medicine 5-7
Dr. DM Arifur Rahman, Dr. Fahim Uddin Ahmad, Dr. Md. Matiur Rahman

Original Article

- ▶ Comparison of Serum Uric Acid Concentrations in Patients with Lichen Planus and other Dermatoses 9-15
Dr. Farah Safa Huq, Dr. Mohammed Saiful Islam Bhuiyan, Dr. Emily Akter, Dr. Khyrun Nahar Shaila
- ▶ COVID-19 and Online Medical Education Perspective; A Study in TMSS Medical College 17-23
Dr. Mst. Nadira Parvin, Dr. Md. Matiur Rahman, Professor Dr. Md. Anup Rahman Chowdhury
- ▶ Assessment of Clinical Characteristics and FNAC Findings of Different Thyroid Lesions in a group of Bangladeshi patients 25-29
Dr. Mehdi Ashik Chowdhury, Dr. DM Arifur Rahman, Dr. A K M Maruf Raza, Dr. Syeda Noorjahan Karim, Dr. Md. Neaz Nowsher, Dr. Zerin Shabnam Rahman, Dr. Mohammad Mahabubul Hoque
- ▶ Efficacy of Mineral Trioxide Aggregate and Calcium Hydroxide as Root Canal Sealer in Non-vital Permanent Tooth 31-37
Dr. Mst. Dilruba Khatun, Dr. Evan-E-Alam Emtakamul Haque, Dr. Musfiqa Aman, Dr. Mostofa Mohammad Ekramul Hasan, Dr. Md. Rakibul Hassan Khan, Professor Dr. Md. Shamsul Alam
- ▶ Clinical Profile of 306 Patients with Chronic Low Back Pain in a Tertiary Care Hospital 39-42
Dr. Ferdousur Rahman Al-Mahmud, Dr. Muhammad Alamgir Mandal, Dr. Mst. Shamina Khatun, Dr. Mohammad Azizur Rahman

Case Report

- ▶ Benign intra-renal lipoma in two years old girl 43-45
Dr. Md. Mofazzal Sharif, Dr. DM Arifur Rahman
- ▶ Sigmoid mesocolon cyst : Case report 46-48
Professor Dr. Md. Rezaul Islam, Dr. A.H.M Shahnewaz Shoubho
- ▶ Abnormal Extension of Sacral Hiatus- A Case Report 49-51
Dr. Rawshon Ara Naznin, Dr. Md. Moniruzzaman, Dr. Afsana Khanam, Dr. Maskura Benzir, Dr. Taslima Akter



An Official Publication of TMSS Medical College



TMSS Medical College Journal (TMCJ)

July 2021

An Official Publication
of
TMSS Medical College, Bogura, Bangladesh

TMSS Medical College Journal (TMCJ)

Vol. 17, No. 2, July 2021

An Official Publication of TMSS Medical College, Bogura, Bangladesh

Editorial Board

Chairman : Prof. Dr. Md. Shahjahan Ali Sarker

Editor in Chief : Prof. Dr. Md. Azfarul Habib

Assistant Editor : Dr. Md. Abdul Mazid

Advisory Editor : Prof. Dr. Moudud Hossain Alamgir

Managing Editor : Dr. Md. Matiur Rahman

Members

Dr. ASM Barkatullah

Prof. Dr. Anup Rahman Chowdhury

Prof. Dr. AKM Ahsan Habib

Dr. Md. Amirul Islam

Advisory Board

Prof. Dr. Hosne-Ara Begum

Prof. Dr. M Afzal Hossain

Prof. Dr. AKM Ahsan Habib

Prof. Dr. Md. Jawadul Haque

Prof. Dr. Sayed Mainul Hasan

Prof. Dr. Hafiza Arzuman

Shahzadi Begum

The TMSS Medical College Journal is published two times a year (January and July). It accepts original articles, review articles and case reports. While every effort is always made by the Editorial Board and the members of the Journal Committee to avoid inaccurate or misleading information appearing in the TMSS Medical College Journal, information within the individual article are the responsibility of its author(s). The TMSS Medical College Journal, its Editorial Board and Journal Committee accept no liability whatsoever for the consequences of any such inaccurate and misleading information, opinion or statement.

Printed by

TMSS Printing Press

Bogura, Bangladesh

e-mail: tmssprintingpress@gmail.com

Address of Correspondence

Executive Editor, TMSS Medical College Journal, TMSS Medical College

Rangpur Road, Thengamara, Bogura, Bangladesh.

Phone: 051-61830, Fax : 051-61830

e-mail: editortmcjournal@gmail.com, Web: www.tmssmedicalcollege.com

Case Report

Benign intra-renal lipoma in two years old girl

Sharif MMS^{1*}, Rahman DMA²

1. Dr. Md. Mofazzal Sharif, Associate Professor, Department of Radiology and Imaging, TMSS Medical College, Bogura.

2. Dr. DM Arifur Rahman, Assistant Professor, Department of Pathology, TMSS Medical College, Bogura.

*Corresponding Author

Abstract

Childhood renal mass are mostly malignant. Most common benign renal lesion of childhood which contains fatty tissue is angiomyelolipoma. Isolated intra-renal lipoma is very rare in children. Previous literature review suggests intra renal lipoma is not only uncommon but also rare variety of benign tumour in paediatric group So, We described a case of two years old female child with right renal benign lipoma.

Key Word: intra-renal lipoma, Benign, paediatric group.

Introduction

Lipomas are benign tumors composed of mature adipocytes. They are the most common soft tissue tumor, seen in about 2% of the population.¹ Childhood renal mass rarely contains adipose tissue. Usually well-defined fat containing renal lesions at imaging are benign in nature and do not require any surgical intervention.^{1,2} Fat containing lesion in children gives strong suspicion of renal angiomyolipoma at imaging. But large amount of fat within a lesion radiologically gives suspicion of presence of malignant lesion.² Previously when imaging was not advanced there was little known about childhood fat containing renal tumours. But spiral CT scan with very thin slice reformatting technique allow detecting fat containing renal tumour and detection of characteristics. It is reported that malignancy should be suspected by presence of intratumoral calcifications, large-irregular contour tumor invading the perirenal or sinus fat, large necrotic tumor with small foci of fat and association with non-fatty lymph nodes or venous invasion.^{3,4} Fat containing benign tumours is rare and among them angiomyolipoma (AML) are common, but primary intrarenal lipomas are extremely rare.^{5,6,7} We reported a case of childhood intrarenal lipoma in two years old female child.

Case report

A female child of two years of age presented with swelling in right side of abdomen. After examination she was advised for chest x ray, complete blood count, urine for routine examination and ultrasonography of whole abdomen. Chest x-ray was no abnormalities, complete blood count, urine examination findings were within normal limit but ultrasonography (USG) revealed echogenic large right renal mass compressing adjacent viscera. As echogenic lesions at ultrasonography are mostly benign in nature having fatty components, report was given as large right renal mass possibly renal angiomyolipoma. Before operation to detect extension of lesion pre-operative CT scan was done and CT scan showed large (about 85x63x87mm) fat containing lesion (HU was -05 indicating fatty tissue) in upper pole of right kidney with focal calcifications, no perilesional infiltration or renal vein infiltration (Figure-1). Differential diagnoses were renal angiomyolipoma, fat containing renal cell carcinoma. After operation, large lobulated yellowish mass was found at upper pole of right kidney which was well separated from adjacent abdominal viscera. Histopathological examination showed the mass was composed of solely mature adipocytes and final diagnosis was renal lipoma (Figure 3).

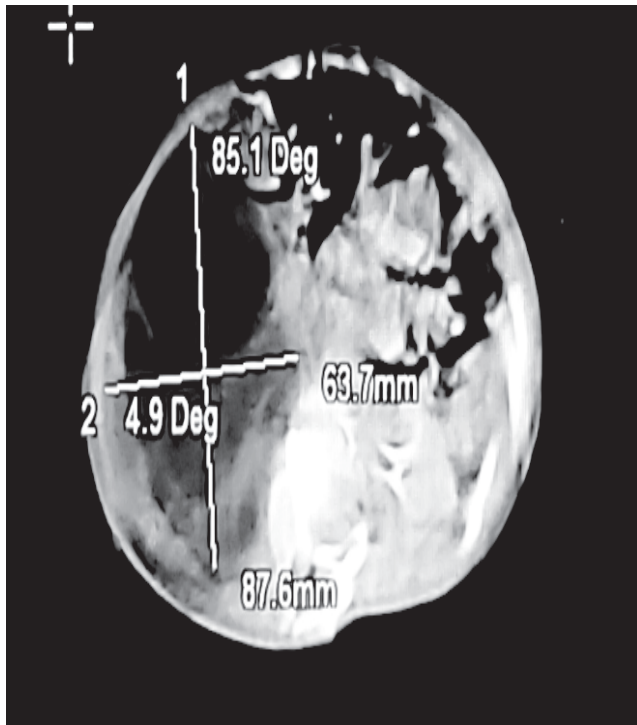


Figure-1: Axial contrast CT scan of abdomen showing large fat containing right renal mass compressing adjacent abdominal structures, no perilesional fat stranding or extension along right renal vein and minimal collection in anterior aspect of right kidney.

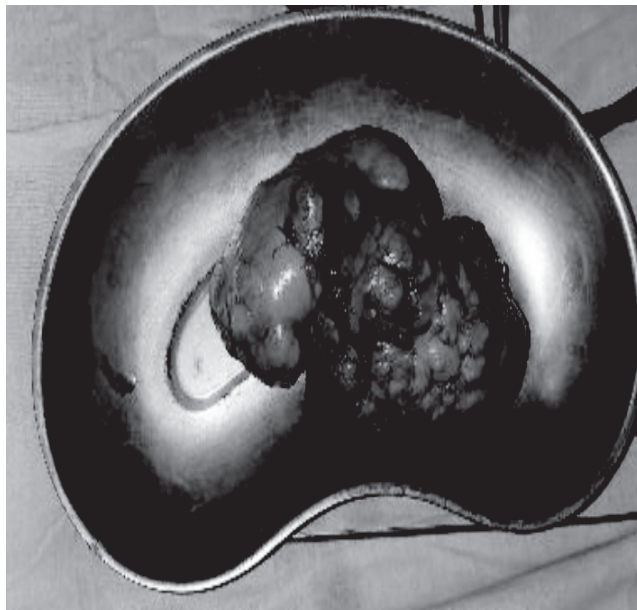


Figure-2: Resected right kidney with lobulated yellowish mass at upper pole.

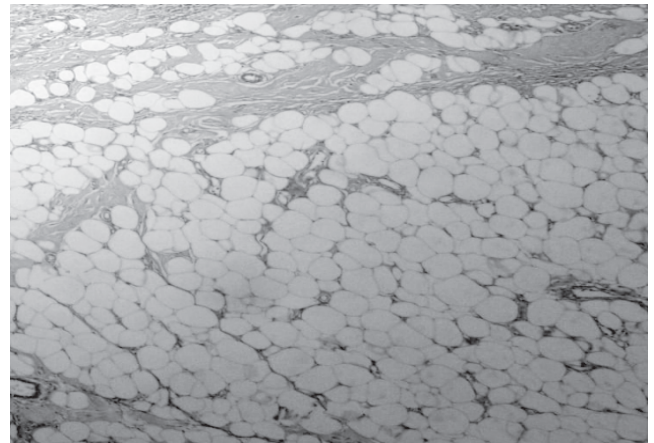


Figure 3: Photomicrograph showing tissue composed of mature adipocytes.

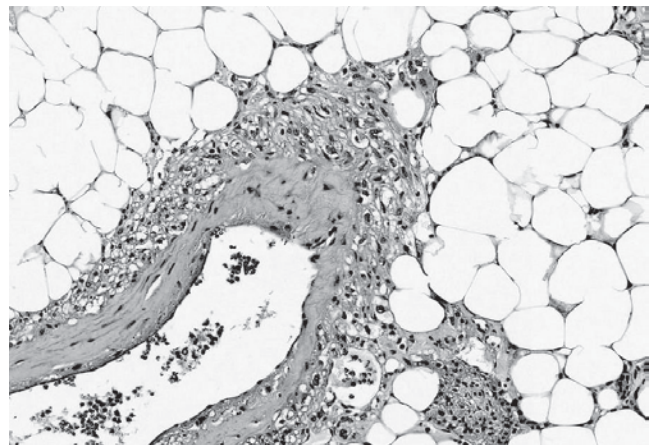


Figure 4: Angiomyolipoma the classic microscopic features of myoid cells with clear cytoplasm spinning off of large vessels in a background of mature adipocytes (After Gardner.⁸)



Figure-5: Sonographic image of left renal mass containing heterogeneous echogenic area suggesting angiomyolipoma (After Hansen et al.¹⁰)

Discussion

Intra-renal lipomas are uncommon childhood renal tumour. Fat containing renal mass are mostly benign and commonest is angiomyolipoma.⁷ Histogenesis of intra-renal benign lipoma is yet not clearly understood.⁹ Renal lipoma typically affects child below three years of age with slight male predominance and rarely affects elderly person. There was similarity in age of presentation of our case compared to previous report.⁹ As this was benign tumour, her complete blood count was normal. However this was unusual for her as Children of developing country like Bangladesh commonly suffered from anaemia of malnutrition, various infections leading to decreased haemoglobin count with leukocytosis and her blood count was within normal limit. USG reveal echogenic renal mass suggesting presence of fat within lesion. Hansen¹⁰ suggested that echogenic mass in kidney at USG are in favour of angiomyolipoma (Figure 5). Everolimus is FDA approved for the treatment of renal fat containing lesion, particularly Angiomyolipomas.¹¹ Treatment should be considered for asymptomatic lesion measuring larger than 3 cm in diameter. But as there is chance of pressure effect on vital structure by lesion or chance of being malignancy, surgery is method of choice for treatment.¹¹ At CT scan our case revealed large lobulated fat containing lesion with focal calcification. Previous study revealed, presence of intratumoral calcifications within large-irregular contour fat containing tumour usually suggested as malignant.^{3, 4} But in our current case CT scan showed no perilesional infiltration or renal vein infiltration suggesting benignity of the lesion.

Conclusion

Excess amount of adipose tissue within renal mass is suspicious for malignant lesion at Radiological investigations. But in unusual cases, lesion might be benign one. So, these lesions should undergo surgical resection, histopathological assessment to reach final correct diagnosis and to take necessary management to avoid patient morbidities if diagnosed at terminal stage.

References

1. Ellingson JJ, Coakley FV, Joe BN et-al. Computed tomographic distinction of perirenal liposarcoma from exophytic angiomyolipoma: a feature analysis study. *J Comput Assist Tomogr.* 2008; 32 (4): 548-52. doi:10.1097/ RCT. 0b013e3181507534.
2. Yousaf A, Nabi U, Hussein ML, Twair A, Gashir MB. Fat-Containing Renal Cell Carcinoma Mimicking Angiomyolipoma: A Radiological and Histopathological Diagnostic Challenge. *Cureus.* 2020. 21; 12(1): e6721. doi: 10.7759/cureus.6721.
3. Chen CL, Tang SH, Wu ST, Meng E, Tsao CW, Sun GH, Yu DS, Chang SY, Cha TL. *BMC Nephrol.* 2013; 14:160.
4. H  l  non O, Merran S, Paraf F, Melki P, Correas JM, Chr  tien Y at al. Unusual fat-containing tumors of the kidney: a diagnostic dilemma. *Radio Graphics.* 1997; 7 (1): 129-144. [https:// doi.org/ 10.1148/radiographics.17.1.9017804](https://doi.org/10.1148/radiographics.17.1.9017804).
5. Farrell C, Noyes SL, Tourojman M, Lane BR. Renal angiomyolipoma: preoperative identification of atypical fat-poor AML. *Curr Urol Rep.* 2015; 16 (3):12. doi: 10.1007/ s11934- 015- 0484-z. PMID: 25677233.
6. Liu X, Wu X, He D, Wei G, Liu F, Lin T, Li X. The first case of renal lipoma in a child. *J Pediatr Surg.* 2011 Jun; 46(6):1281-3. doi: 10.1016/ j.jpedsurg.2011.03.015. PMID: 21683239.
7. HungLung K, HsiLin H, ChunHsiung H, WenJeng W, JinnYuh G, ChiangShin L. Primary Intrarenal Lipoma: A Case Report. *Kaohsiung J Med Sci* 2005; 21 (8): 383-386.
8. Gardner JM. Available at: [https://en.wikipedia.org/ wiki/ Angiomyolipoma#/ media/ File: Angiomyolipoma.PEComa.JPG](https://en.wikipedia.org/wiki/Angiomyolipoma#/media/File:Angiomyolipoma.PEComa.JPG).
9. Vukmirovi   F, Vukmirovi   M, Vukmirovi   IT et al. Renal Lipoma: a case report. *Cent. Eur. J. Med.* 2013; 8: 328–330.
10. Hansen KL, Nielsen MB, Ewertsen C. Ultrasonography of the Kidney: A Pictorial Review. *Diagnostics.* 2015; 6 (1): 2.
11. Weerakkody Y, Amini B. Renal angiomyolipoma. *Radiopaedia.* Available at: [https:// en.wikipedia.org/wiki/Angiomyolipoma](https://en.wikipedia.org/wiki/Angiomyolipoma).
(*TMSS Medical College Journal* 2021;17(2):43-45)