Bilateral renal lymphoangiomatosis

Alqahtani Raed a,*, Alkhateeb Sultan b, Al-Mutairi Bader c

a Sattam Bin Abdulaziz University, College of Medicine, Surgery Department, Saudi Arabia
b Department of Surgery, Division of Urology, King Abdulaziz Medical City, Saudi Arabia
c Department of Radiology, King Abdulaziz Medical City, Saudi Arabia

A R T I C L E   I N F O

Article history:
Received 9 July 2015
Received in revised form 27 November 2015
Accepted 27 November 2015
Available online 7 December 2015

Keywords:
Renal tumor
Renal cystic disease
Urethral tumor
Renal infection

A B S T R A C T

INTRODUCTION: Renal lymphangiomatosis is a rare congenital benign disease of renal lymphatic system, here we are presenting a very rare form of disease which is bilateral form.

PRESENTATION OF THE CASE: A young adult presented to our clinic after being referred from primary care clinic with intermittent bilateral flank pain and no other symptoms after extensive radiological investigations diagnosis has been made and confirmed by radiological finding of disease. Active treatment usually preserved for complex cases and for the complications of the disease but in our patient as needed analgesia worked well in controlling his intermittent pain and his wish not to pursue any intervention. The vague presentation with initial imaging rising suspicion of renal tumor or complex renal cyst might cause psychological stress on the patient, which our patient had, but reassurance after extensive radiological work up relive that’s stress.

DISCUSSION: Although it is very rare disease to be bilateral but wide variety of other differential diagnoses make importance of disease recognition and accurate diagnosis is the key.

CONCLUSION: Renal lymphangiomatosis is a rare benign disease of renal lymphatic, which usually affect one side, but bilateral form is very rare form, which may raise the suspicions of genetic form of renal malignancy. Accurate diagnosis requires work up to role out malignant and other renal tumor, which require active surgical management.

© 2015 The Authors. Published by Elsevier Ltd. on behalf of IJS Publishing Group Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Background

Bilateral renal lymphangiomatosis is a rare disease with few cases reported in literatures. The clinical history and investigation could raise the possibility of malignant disease in differential diagnoses.

2. Case presentation

Young adult known case of essential hypertension on medication started to complain of bilateral flank pain which was intermittent not severe localized to his flank with no other symptoms. No family history of renal tumors. His clinical examinations Normal except for his blood pressure. His laboratory investigation came pack normal he underwent abdominal ultrasound initially, which showed bilateral cystic renal masses images in Fig. 1. CT scan done for further evaluation, which shows the same finding of non-enhancing cystic renal masses images in Fig. 2. MRI Urogram done for further identification of masses, images in Fig. 3. After extensive radiological investigations and the finding of characteristics features in those cystic masses which represent lymphoangiomatosis. The diagnosis being discussed with the patient himself after explaining the rarity of disease and management options available in the clinic and ease of follow up he decided for not pursue any active surgical intervention with regular follow up in our out patient clinics.

3. Investigations

Abdominal ultrasound.
CT scan of abdomen and pelvis.
MRI Urogram.

4. Differential diagnosis

Renal malignant tumor.
Renal cystic disease.
Angiomyolipoma.
Renal abscess.

5. Treatment

No active surgical intervention were offered to the patient based on his request except analgesic medications as needed.
6. Outcome and follow-up

Patient was diagnosed as bilateral renal lymphangiomatosis and was given follow up appointment.

7. Discussion

Renal lymphoangiomatosis, rare benign congenital anomaly due to failure of lymphatic system around the kidney to drain to retroperitoneal lymphatic system, which will cause dilation of lymphatic duct and formation multiple cystic lesion in perinephric space and renal sinus. There is no sex difference or specific age group for incidence and presentation. It might be familial [3,4]. This rare anomaly can be asymptomatic or can present as flank pain, hypertension, hematuria and proteinuria [3].

The diagnosis of renal lymphangiomatosis can be confirmed with needle aspiration of cystic fluid but the radiological feature can make the clinician make the diagnosis confidently [5,6]. The reported complication of renal lymphohangiomatosis are obstructive uropathy [7] secondary hypertension due to obstruction and mass effect of the lesion [8]. Pregnancy can be an exacerbating factor for this disease by increasing the cyst size and fluid collection [4]. No need for treatment usually as long as the patient asymptomatic. Percutaneous drainage has proved it’s effectiveness in treating symptomatic patient and pregnant women [7,9].

8. Conclusion

1. Renal lymphangiomatis is extremely rare disease with no sexual difference or age group tendency.
Can be asymptomatic or symptomatic due to the cyst itself or its mass effect.

Radiological finding can help in making the diagnosis with no need for invasive procedure.

Usually require no treatment unless in specific condition.

Conflicts of interest

No conflict of interest.

Funding

There is no funding source.

Ethical approval

We have ethical approval from our research center.

Author’s contribution

Alqahtani, Raed primary author Alkhateeb, Sultan secondary author who supervise the review Almutaiti, Bader the radiologist who report the image and made the diagnoses.

Consent

I have obtain written consent from the patient.

Guarantor

Alqahtani Raed.

References

[3] T.P. Rajeev, S. Barua, P.M. Deka, S. Hazarika, Case report on bilateral perirenal lymphangiomatosis, Indian J. Urol. 22 (2006) 73–74.

[4] W.T. Meredith, E. Levine, N.G. Ahlstrom, J.J. Grantham, Exacerbation of familial renal lymphangiomatosis during pregnancy, AJR Am. J. Roentgenol. 151 (1988) 965–966.

[5] L.T. Ramseyer, Renal lymphangiectasia, Radiology 219 (2001) 442.

[6] M. Battaglia, P. Dironno, G. Carriero, et al., Renal peripelvic multicystic lymphangiectasia: is echographic diagnosis possible? Arch. Ital. Urol. Androl. 68 (Suppl. 5) (1996) 65.

[7] J.S. Chiu, C.J. Wu, G.H. Sun, et al., Obstructive uropathy associated with bilateral renal lymphangiomatosis, Nephrol. Dial. Transplant 19 (2004) 2923.

[8] H. Savin, I. Jutrin, M. Ravid, Reversible renal hypertension due to renal hygroma, Urology 33 (1989) 317.

[9] M. Ozmes, O. Daren, D. Akata, et al., Renal lymphangiomatosis during pregnancy, Eur. Radiol. 11 (2001) 37.