

Acute renal haemorrhage as a result of spontaneous rupture of angiomyolipoma

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ABSTRACT

Introduction: Angiomyolipomas are benign tumours that are made up of a mixture of fatty tissue, thick blood vessels and smooth muscle in different proportions. Angiomyolipomas are found as solitary and multiple tumours of different sizes, they can be over 20 cm in diameter. Symptomatic angiomyolipomas over 4 cm are potentially dangerous due to spontaneous rupture, nephrectomy is indicated in case of heavy bleeding which cannot be stopped or when the tumour involves the kidney.

Objective: Presentation of a rare case of spontaneous rupture of renal angiomyolipoma and subsequent development of haemorrhagic shock as well as adequate treatment.

Case Presentation: Patient K. K. born in 1974, initially with: 23.01.2017 at 02.30 min. admitted to abdominal surgery due to severe colic abdominal, which started in the periumbilical region and then spread throughout the abdomen. Due to the deterioration of the condition, it is decided to intervene surgically, since the urography suspected a ruptured angiomyolipoma, the patient was urgently admitted to the operating room. After the application of nephrectomy, the bleeding stops and the patient's condition begins to stabilize.

Conclusions: Although benign tumours, angiomyolipomas can be quite dangerous tumours, especially angiomyolipomas over 4 cm, which rupture not infrequently.

Key words: UCCK -prishtina, renal trauma, renal rupture, nephrectomia, renoraphia

INTRODUCTION

Angiomyolipomas are benign tumours that are constructed by mixing fatty tissue, thick blood vessels and smooth muscles in different proportions [1].

Participate in hamartoma, which consists of abnormal mixing tissue that is normally in the given organ. The muscular tissue has an embryonic appearance [1]. Symptomatic angiomyolipoma above 4 cm are potentially dangerous due to spontaneous rupture, nephrectomy is indicated in case of severe bleeding which cannot be stopped otherwise or when the tumour includes the entire kidney [2].

Almost one-third of the patients are reported with abdominal symptoms acutely due to kidney haemorrhage and peritoneal tissue [3-5]. Angiomyolipomas are solitary and multiple tumours with different sizes, in some cases can be over 20 cm in diameter [6]. Angiomyolipomas also appear as isolated kidney tumours. These sporadic cases are most common in females in the 5th and 6th decades, appearing in the form of unilateral tumours located in the kidney pole [7-9].

Angiomyolipomas are found in 50%-80% of patients with tuberous sclerosis, in these cases they are; Multiple, bilateral and often asymptomatic [9, 10]. Tuberous sclerosis is a hereditary disease that is characterized by; Epilepsy, mental retardation, sebaceous adenoma and hamartomas in various organs [10, 11].

Purpose of the study

Presentation of a rare case of spontaneous rupture of renal angiomyolipoma and consequent development of haemorrhagic shock and adequate treatment.

CASE PRESENTATION

Patient K. K. born in 1974, initially on: 23.01.2017 at 02:30 AM was accepted in abdominal surgery due to strong abdominal colic,

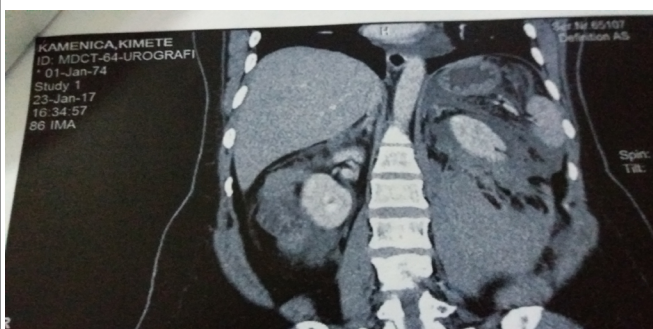


Fig. 1. A CT scan showing the hematoma from the lower pole and the left renal side of the kidney

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which started in the periumbilical region and then spread to the entire abdomen.

Biochemical analyzes were erythrocytes 3.72 , hematocrit 33 , hemoglobin 106 g / l, leucocytes-17.2 , urea-7.2 creatinine-72 , total bilirubin 1.2 m mol/l amylase / 49 mmol / l.

After the realization of abdominal CT and pelvic CT on January 23, 2017 at 16:34 and this image was obtained (Figure 1).

In the clinic the patient was treated with; Infusion, antibiotic, antiemetic, H2 blockader and analgesic, and 4 blood doses.

Despite receiving 4 doses of blood, haematocrit fell to 22 and Hgb to 60 g / l.

Due to the deterioration of the health condition I decided to intervene surgically because in the CT urography was suspected for being ruptured angiomyolipoma and on the patient was urgently placed in the theatre room in Figure 2.



Fig. 2. A CT scan showing massive hematoma from the lower pole of the kidney.



Fig. 3. A photo showing massive hematoma with kidney after nephrectomy

RESULTS AND DISCUSSION

The patient intra-operative received 2 doses of plasma and 5 other doses of blood.

Operative approach is made, Op: Median laparotomy. Medial positioning of the descending colon that enables us to approach the hilus and take care of the hilus vessels. Once the tumour had a size of 13 by 10 cm+12 cm, the length of the kidney.

We also applied a transverse cut on the abdomen wall for easier access to the hilus. After application of nephrectomy the bleeding stops and the condition of the patient begins to stabilize (Figure 3).

Outcome

After surgery, the patient was extubated and sent to the Urological Clinic. Postoperatively patient was treated with infusions, transfusions, antibiotics and analgesics, and her condition was improved so that on the 5th postoperative day, the patient was released at home, in good condition and with improved laboratory analysis.

Histopathologic analysis of the tumour: angiomyolipoma is mentioning in the Figure 4.

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 QENDRA KLINIKE UNIVERSITARE E KOSOVËS
 INSTITUTI I ANATOMISE PATOLOGJIKE

HOSPITAL AND UNIVERSITY CLINICAL SERVICE OF KOSOVO
 UNIVERSITY CLINICAL CENTRE OF KOSOVA
 INSTITUTE OF ANATOMIC PATHOLOGY

RAPORT HISTOPATOLOGJIK / CITOLOGJIK
 HISTOPATHOLOGY / CYTOLOGY REPORT

Derguesi:
 Referring Inst: QKUK- Klinika e Urologjisë Vendi: Prishtinë

Emri, emri i prindit, mbiemri:
 Name, name of parent, last name: Kimete Kamenica Moshë: Age

Profesioni:
 Occupation: Gjinia: F Vendlindja: Ferizaj

Diagnoza dhe të dhënat klinike:
 Clinical diagnosis and data: Tu renis sin. et retroperitonealis sin (angiomyolipoma)

Op: Nephrectomia sin

Mjeku udhëzues / Referring physician:
 Dr. Arber Neziri, dr .sci

Data e marrjes së mostrës: Sampling date	Data e pranimit: Date of admission	Substanca fiksuese: Fixation	Formalinë
Nr i ekzaminimit: No of examination	Procesuar më: Processed on	Prefunduar: Completed	16.02.2017
Meloda e ngjyrit: Staining	Numri i prepe-Steve: Number of slices		17p

Ekzaminimi makroskopik:
 Materiali i pranuar është veshka e majte me dimensione 20x11x8cm, me një ndryshim në pjesën e sipërme me kufij të qartë nga indet e veshkës. Në prapëri në pjesën e sipërme të veshkës vëhet re ndryshim tumoral, me ngjyrë gri në të verdhë me diametër 10cm, në qendër nekrotik dhe hemorragjik.

Ekzaminimi mikroskopik:
 Mikroskopikisht formacioni tumoral është i ndërtuar nga indet dhjamor matur me vaza gjaku me mure të trasha dhe nga vatra me qeliza të zjaturura boshtrorë - mioците dhe disa qeliza epiteloide të rrrubullakta. Në periferi të formacionit tumoral gjendet pjesë e indit të veshkës me ndërtim të rregullt histologjik.
 *Profilin histologjik shikon në favor të diagnozës klinike.

DG: ANGIOMYOLIPOMA

Patologu:
 Dr. Islam Kryeziu

Fig. 4. A photo showing histopathologic diagnosis of tumour

CONCLUSIONS

Renal-Angio Myo Lipoma (AML) is a benign neoplasm of a hamartomata's origin that presents lesions occasionally associated with tuberous sclerosis, or as a single unilateral lesion.

Usually are asymptomatic, but in some cases can manifest the following clinical triad: abdominal pain, palpable mass and haematuria. In our case massive retroperitoneal haemorrhage was found to be the cause, produced by spontaneous rupture of an angiomyolipoma in the left kidney. Despite being benign tumours, angiomyolipomas can be very dangerous tumours, especially angiomyolipomas over 4 cm, which can rupture very often.

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