Background: Renal artery aneurysm is very rare and most often incidental finding and we will present it in our case report. Case Report: We report a case of 65 years old women who was sent to our hospital Clinic of Radiology. We detected a renal artery aneurysm on the left side on the ultrasound and later we confirmed it on the CTA of the abdominal aorta and its visceral branches. Discussion: Renal artery aneurysms can be classified in true aneurysm and pseudoaneurysm. They are more often find at females. They can be fusiform or saccular in appearance and are extraparenchymal in 90% of cases. Most are saccular and noncalcified. Conclusion: In the case of renal artery aneurysm that we founded we recommended regular Color Doppler ultrasound examinations, consultation from the urologist and CTA control if there is a need. Key Words: Aneurysm, CTA, Renal artery

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1. INTRODUCTION

The first published case report about a renal artery aneurysm was by Rouppe in 1770. It was a case of a sailor who fell onto his right flank. Autopsy revealed a large false aneurysm of the renal artery with rupture. (1)

Renal artery aneurysms are uncommon, occurring in approximately 0.09% of the general population. Very often this entity is an incidental finding. (2)

2. CASE REPORT

History: We report a case of 65 years old women who was sent to our hospital Clinic of Radiology. She was suspected for having a renal tumour after having an ultrasound examination only on B-mode in primary care institution. It was an accidental finding so the doctor sent her to us to do the evaluation of the mass that he finds. Clinical examination: She was asymptomatic and did not complained at all.

Diagnostic findings: We did the Color Doppler ultrasound and saw that the mass next to the left kidney is vascular. It had biphasic arterial flow so we assumed that the patient had a renal artery aneurysm. To fulfil the examination we decided to do the CTA of the abdominal aorta and its visceral branches. (3) (Figure 1).

We did the examination on GE 64 slices light speed VCT. On the CTA we find that the both renal arteries are leaving aorta in expected site. (Figure 2). The right renal artery was in its whole flow with regular diameter. The left renal artery in its middle part had a saccular-baggy aneurysmatic broadening with the biggest diameter of 26 mm. The renal artery aneurysm was directed up and forwards in relation to the left renal artery. The renal artery aneurysm had a 5,1 mm wide semicircular thrombotic mass located medial. The aneurysm was associated to the main renal artery with aneurysmatic neck that is 7,8 mm wide. (Figure 3).

All the others branches of the abdominal aorta were without any abnormalities except the sphen of atherosclerosis.

3. DISCUSSION

Visceral artery aneurysms are the ones who affect the celiac, the superior and inferior mesenteric arteries and the renal artery. Renal artery aneurysms are rare and they are the second or third most common visceral artery aneurysms (in 15%–22% of all cases). Renal artery aneurysms are discovered at 0.3%–0.7% of autopsies. They are more often at females. Most are saccular and noncalcified and tend to occur at the bifurcation of the renal artery. (4, 5).

Some authors classify renal artery aneurysms in true and pseudoaneurysm. True aneurysm include all layers of the artery and are usually inherited disorders. They can be fusiform or sac-
circular in appearance and are extraparenchymal in 90% of cases. The causes of true aneurysm can be Fibromuscular dysplasia or Ehlers-Danlos syndrome.

Pseudoaneurysm do not include all layers of the artery, and can be extraparenchymal or intraparenchymal. The causes for pseudoaneurysm can be blunt abdominal trauma, spontaneous at mycotic Kawasaki disease, iatrogenic during endovascular procedures. (6). The renal artery aneurysm that we found was at female patient and it was extraparenchymal and with saccular form what goes with statistics. It was probably inherited because the patient had no other diseases, without any symptoms and she denied any kind of trauma. (7)

We mention hat the treatment of the renal artery aneurysm can be surgical or endovascular in cases of rupture or if it causing renal hypertension. (8, 9). Sometimes there is a option for radical nephrectomy reported by Japanese authors. (10).

4. CONCLUSION

Renal artery aneurysm is rare and often incidental finding and because there is always a risk of complications such as rupture, we recommended regular Color Doppler ultrason examinations, consultation from the urologist and CTA control if there is a need.

REFERENCES