

Материал поступил в редакцию: 05-04-2014
Материал принят к печати: 05-04-2014
УДК 616.61;615.849

Renal Arteriovenous Malformation

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Renal arteriovenous malformation (AVM) is a rare and can be complicated with internal ruptures, gross hematuria and sudden death. Multislice computed tomography is the one of the best minimally invasive screening and available diagnostic tool. In this case we present the renal AVM in 63-years male patient. We discussed the genesis of congenital or post-traumatic AVM.

Keywords: Renal arteriovenous malformation, multislice computed tomography, case report

J Clin Med Kaz 2014;1(31):55-56

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БҮЙРЕКТІК АРТЕРИЯЛЫҚ-КӨКТАМЫРЛЫҚ МАЛЬФОРМАЦИЯ

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Ұлттық ғылыми медициналық орталық АҚ ¹сәуелік диагностика мен ²экстракорпоральды гемокоррекция бөлімдері, Астана, Қазақстан

Бүйректік артериялық-көктамырлық мальформация (АВМ) ішкі қан кетулермен, макрогематуриямен жүретін және кенеттен болатын өлімге жиі әкелетін сирек кездесетін ауру. Көпқабатты компьютерлі томография азинвазивті скринингтің ең жақсы әрі қолжетімді түрі. Осы клиникалық жағдайда біз 63 жастағы ер адамдағы бүйректік артериялық-көктамырлық мальформацияның кездесуін сипаттаймыз. Мақалада бүйрек қантамырларының АВМ-ның кеш анықталған туа біткен немесе жаракаттанудан кейінгі генезін талқылаймыз.

Маңызды сөздер: Бүйректік артериялық-көктамырлық мальформация, мультиспиральді компьютерлі томография

ПОЧЕЧНАЯ АРТЕРИО-ВЕНОЗНАЯ МАЛЬФОРМАЦИЯ

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Почечная артериовенозная мальформация (АВМ) является редким заболеванием, которая может сопровождаться и осложняться внутренними разрывами, макрогематурией и являться одной из причин внезапной смерти. Многослойная компьютерная томография является одним из лучших и доступных диагностических методов малоинвазивного скрининга. В этом клиническом случае мы описываем выявленную почечную АВМ у мужчины 63-х лет. В статье обсуждался вопрос поздно выявленного врожденного или посттравматического генеза АВМ почечных сосудов.

Ключевые слова: Почечная артериовенозная мальформация, мультиспиральная компьютерная томография.

LETTER TO EDITOR

A 63-years male patient admitted to the clinic with complaints of abdominal discomfort. He marked that 3 years ago he has falls from the 2nd floor of the constructing building, but had not checked up for any complications. Physical examination revealed the vascular bruits on the left side of the abdo-

men. Contrast CT image (Figure 1, A) revealed network of blood vessels at the upper pole of the left kidney and draining to supra- (arrow 1) and infrarenal (arrow 2) segments of the vena cava inferior. Also, there were two hemangiomas (arrows) in the right lobe of the liver (Figure 1, B).

FIGURE LEGENDS

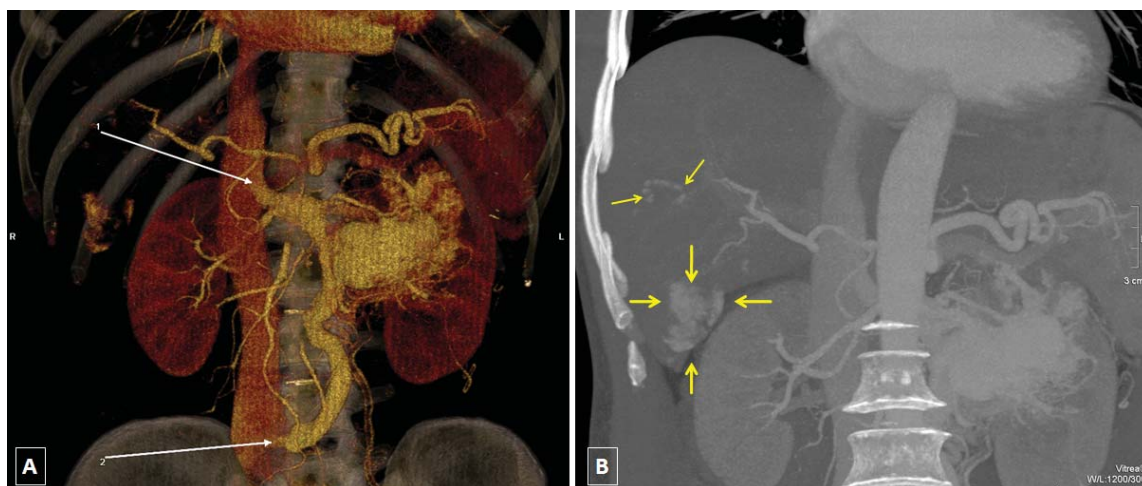


Figure 1. Contrast CT image (panel A) showed network of blood vessels at the upper pole of the left kidney and draining to supra- (arrow 1) and infra-renal (arrow 2) segments of the vena cava inferior. There were revealed two hemangiomas (arrows) in the right lobe of the liver (panel B).

Laboratory data (blood and urine samples) were in the normal range. Patient was referred to vascular surgery for surgical treatment.

Renal arteriovenous malformation is a rare and life threatening disorders, which can complicated with internal ruptures, gross hematuria and sudden death. To the best of our knowledge, the incidence of renal arteriovenous malformation (AVM) at autopsy is less than 1 case per 30.000 patients, and according to the multislice CT (MSCT) angiography - less than 1 per 1.000-2.500 patients as well [1]. Renal AVM are usually either congenital or acquired (iatrogenic or posttraumatic) [3]. In our case, the renal AVM

was associated with congenital vascular pathology, that confirmed by revealed multiple hemangiomas of the liver in this patient. However, presence of abdominal trauma history cannot exclude the traumatic genesis of renal AVM. In such cases, MSCT is the one of the minimally invasive screening and available diagnostic tool. A treatment option varies from dynamic monitoring up to nephrectomy, and usually conducts superselective embolization or resection of the affected kidney [2]. In this case we present the possibility of renal AVM development during the 3 years, which is related with late referral of patients to the physician after received traumas.

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