

RECURRENT CELL CARCINOMA OF THE LEFT KIDNEY AFTER 27 YEARS AFTER NEPHRECTOMY ON THE RIGHT. CASE REPORT

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Abstract

Clinical case of the recurrent renal cell carcinoma 27 years after contralateral nephrectomy. Patient 56 years old male, admitted to the hospital with gross haematuria. Patient was examined: on ultrasound and computed tomography neoplasm of solitary left kidney was revealed. Patient history: in 1991 patient underwent open nephrectomy on the right about renal cell carcinoma. Afterwards was under follow-up for 5 years and no signs of recurrence were revealed on control check-up. On computed tomography scans kidney has the dimensions 20,4x8.62 cm and neoplasm 10,5 x 8,3 cm extending from upper pole to the renal hilum. Considering that patient has only one kidney we decided to perform renal sparing surgery but it was unclear precisely the state of invasion of renal hilum, thus it was planned to attempt extracorporeal resection of kidney.

27 жыл бұрын нефрэктомиядан кейінгі рецидивті жалғыз қалған сол бүйректің бүйрек-жасуша карциномасының клиникалық оқиғасы

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Аңдатпа

27 жыл бұрын нефрэктомиядан кейінгі рецидивті жалғыз қалған сол бүйректің бүйрек-жасуша карциномасының клиникалық оқиғасы. Науқас 56 жаста, ер адам, келіп түскен кезде зәрдің қан аралас болуына шағымданады. Тексеріп қараған кезде ультрадыбысты зерттеу және компьютерлік томографияда сол бүйректің ісігі анықталды. Науқастың ауру тарихында: 1991ж науқасқа оң жақ бүйректің бүйрек-жасуша карциномасы себебінен оң жақты ашық нефрэктомия жасалынған. Тұрғылықты жері бойынша дәрігерде 5 жыл бойы бақылауда болған, бірақ рецидив белгілері болмаған. Компьютерлік томографияда сол бүйректің өлшемдері 20,4 x 8,62 см, ісіктің көлемі 10,5 x 8,3 см болды. Ісік бүйректің жоғарғы полюсынан бүйрек қақпасына дейін жайылған. Науқаста жалғыз қалған тек сол бүйрек болғандықтан науқасқа ағзаны сақтау отасы жасалуына шешім қабылданды, бірақ түзілістің бүйрек қақпасына инвазия дәрежесін нақты білмегендіктен экстракорпоральді бүйрек резекциясы планданды.

Рецидивный почечно-клеточный рак единственной оставшейся левой почки после ранее проведенной 27 лет тому назад правосторонней нефрэктомии. Клинический случай

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Аннотация

Клинический случай рецидивного почечно-клеточного рака единственной оставшейся левой почки после ранее выполненной 27 лет тому назад правосторонней нефрэктомии. Пациент 56 лет, мужчина, поступил с жалобами на макрогематурию. При обследовании на ультразвуковом исследовании и компьютерной томографии было выявлено образование левой почки. Из анамнеза пациента: в 1991г. пациенту была выполнена открытая нефрэктомия справа по поводу почечно-клеточного рака. Пациент находился под наблюдением врача 5 лет, в течение которого не было рецидива заболевания. На компьютерной томографии размеры левой почки составляли 20,4x8.62 см, а образования - 10,5 x 8,3 см. Последнее распространялось от верхнего полюса до ворот почки. Учитывая единственную оставшуюся левую почку пациента, было принято решение провести органосохраняющую операцию, однако до сих пор не было понятно четко степень инвазии образования в области ворот, поэтому планировались проведение попытки экстракорпоральной резекции почки.

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Keywords

recurrent renal cell carcinoma, solitary kidney, extracorporeal resection.

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Ключевые слова

рецидивный почечно-клеточный рак, единственная почка, экстракорпоральная резекция.

Introduction

Renal cell carcinoma is the most frequent of the urologic malignancies, with approximately 20% to 30% of patients presenting with metastatic disease with mortality rates more than 40%. Surgical resection for clinically localized disease is the common choice for curative intervention. However, recurrence rates of 20% to 40% after nephrectomy for clinically localized disease [1, 2].

The greatest risk of recurrence for RCC occurs within the first 5 years after nephrectomy, with the majority of recurrences occurring within 3 years. Although recurrences have been reported as late as 30 years following nephrectomy, rates of 43% in the first year, 70% within the second year, 80% within 3 years, and 93% within 5 years have been reported [3,4]

Tumor stage plays an important role in timing of recurrence, with T1 tumors generally recurring between 38 and 45 months, whereas T3 tumors generally recur between 17 and 28 months follow-

ing initial nephrectomy. After nephrectomy, the incidence of RCC recurrence has been reported to be 7% with a median time of 38 months for T1 tumors, 26% with a median time of 32 months for T2 disease, and 39% with a median time to recurrence at 17 months for T3 tumors [5, 6].

RCC has been shown to metastasize to almost all soft tissues in the body, but most commonly to the lung, followed by bone, liver, brain, and local recurrence. Metastases to brain, bone, and liver often present as widely disseminated disease [7]

Time to disease recurrence or progression is important in planning surveillance. In the literature, most of the tumour recurrences occur within 5 years [1-5]. Some authors advocate follow-up for the first 5 years, others for 10 years.

Contralateral kidney involvement with tumour, has been reported to occur in 0.4% to 12.9%. Positive surgical margins and multifocality were good predictors in clear cell renal cell carcinoma and nuclear grade for recurrent papillary renal cell carcinoma [8].

Case report

A 56 years-old man admitted to our hospital with gross haematuria. In past, 27 years ago, patient underwent right side open nephrectomy for renal cell carcinoma. Afterwards he was under follow up for 5 years during this period no signs of recurrence were detected.

On computed tomography scans neoplasm of the solitary left kidney was revealed. Kidney has the following dimensions: 20,4x8.62 cm. Also sizes of the neoplasm were measured - 10,5 x 8,3 cm, extending from upper pole to the renal hilum (Pic. 1).

Laboratory tests were also performed: creatinine was 1.59 mg/dl, BUN – 8.0 mmol/l, glucose – 8.0 haemoglobin 98 g/l.

Concurrently patient has diabetes mellitus type 2, insulin-required state. Previously patient has episodes of obstruction of upper urinary tract due to blood clots with subsequent acute kidney injury and creatinine rise up to 5.65 mg/dl.

Taking into account that patient had only one kidney and big dimensions of the latter we decided to preserve kidney by performing renal-sparing surgery, if possible. But it was not clear the state of invasion of neoplasm to the renal hilum. So we planned firstly to perform extracorporeal resection of kidney on back-table and, if possible, to perform subsequently autotransplantation of kidney.

Median laparotomy was chosen as surgical approach. Kidney was fully dissected from surrounding tissues. Ureter, artery and vein were temporarily clamped and kidney was taken on a back-table, washed out by special solution (Custodiol) (Pic2.).

Fig. 1.
CT scan demonstrates the neoplasm of the left kidney extending from the upper pole to the renal hilum.

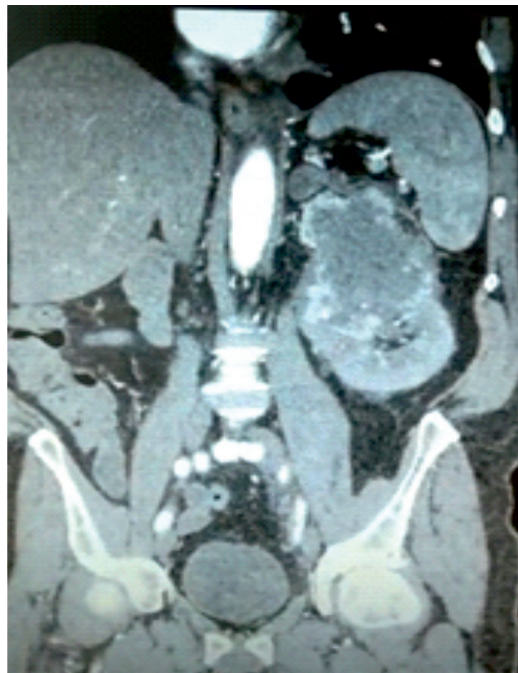
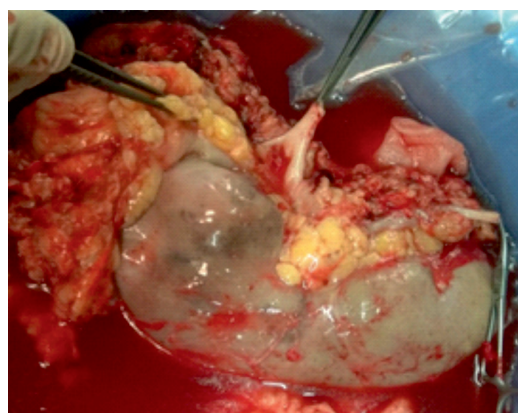


Fig. 2.
Back-table. Kidney is washed out with special solution (Custodiol). Margins of the lesion are seen clearly



Kidney was divided longitudinally from the top to the hilum across the neoplasm to assess the state of invasion and possibility to save the kidney (Pic 3.).

As seen in gross specimen neoplasm invades the renal hilum, intimately to renal artery and vein. Thus, it was surgically not feasible to preserve this kidney and back table finished afterwards. Clamped renal vessels were then clipped and surgery finished closing the wound. Patient was prepared to hemodialysis by placing double-lumen catheter and formation of arterio-venous fistulae on the left forearm.

Conclusion

In this case renal cell carcinoma recurred after 27 years of initial diagnosis and remove of the contralateral kidney. Taking this case as an example it is not precisely clear how long should be patient under follow-up. Unfortunately, we don't have any data about the grade of neoplasm at initial diagnosis in the past.

We suggest monitoring the patients after nephrectomy about the renal cell carcinoma for 5

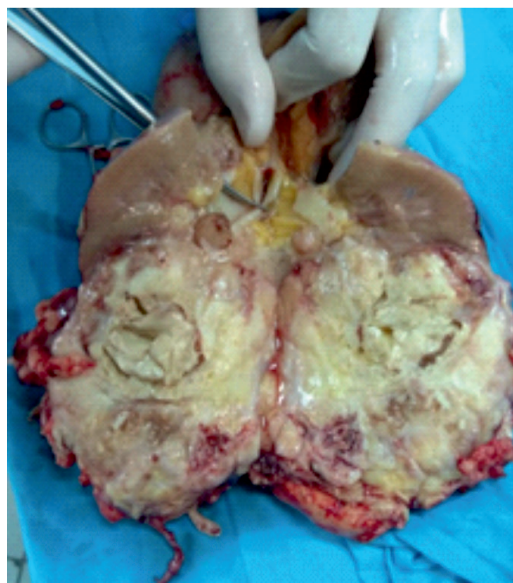


Fig.3.
Gross specimen. The lesion extends from upper pole to the renal hilum, intimately to the renal vessels

years annually and afterwards to follow-up once in 2 years subsequently. It will make possible to detect recurrence and at least at stage of a small size renal sparing surgery can be accomplished.

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