Renal Tumor – Case 1

V Pomorskie Spotkanie Uro-Onkologiczne

Rak nerkowokomórkowy
RCC Case 1

• 70 year old man, diabetes type1, hypertension (2 drugs), no hematuria, US as diagnostic procedure without any symptoms (probably due to hypertension) Creatinine 1,4 mg/dl

• TAUS revealed 37 mm tumor of left kidney. Tumor is localised in the upper pole, inside parenchyma and close to the collecting system
CT was performed

30 mm pathologic, contrast enhancing mass in the upper pole of the left kidney with no extrarenal invasion, no renal vein thrombus and no lymph node enlargement.

Right kidney without pathology with normal excretory function.

Chest X ray - negative
What to do now?

- A - Nephrectomy
- B - Nephron Sparing Surgery
- C - Biopsy of the tumor and decision (watchful waiting or surgery)
- D - Radiofrequency ablation
- E - Watchful waiting
Patient underwent NSS. Open surgery. “Warm ischemia” time - 18 minutes

- Pathology:

**RCC** (clear cell), G-2, no necrotic tissue, no other risk factors except focal (3 mm long, less than 1 mm) surgical margin
Is any other further treatment necessary?

- **A** - no - patient should have active surveillance
- **B** - Yes - nephrectomy
- **C** - Yes - systemic treatment
- **D** - other?
Watchful waiting was chosen

• Predictive Factors for Ipsilateral Recurrence After Nephron-sparing Surgery in Renal Cell Carcinoma


• Positive Surgical Margin Appears to Have Negligible Impact on Survival of Renal Cell Carcinomas Treated by Nephron-Sparing Surgery

“W.W.” was chosen. What is the proper surveillance method?

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<th>Risk profile</th>
<th>Treatment</th>
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<td>CXR and US</td>
<td>CXR and US</td>
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<td>Intermediate</td>
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<tr>
<td>High</td>
<td>RN/PN/cryo CT o/RFA</td>
<td>CT</td>
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<td>CT</td>
<td>CXR/CT alternate years</td>
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</table>

radical nephrectomy; PN = partial nephrectomy; CXR = chest X-ray; ultrasound of kidneys and renal bed; CT = CT of chest and abdomen; cyro = cryotherapy; RFA = radiofrequency ablation
In the 4 year of observation US revealed small renal mass in the lower pole of the same (left) kidney

• CT confirmed the presence of exophitic mass 16 mm
• Lymph nodes not enlarged
• CT chest - no metastases
• Diabetes (insulin dependent), hypertension (3 drugs), creatinine 1,55 mg/dl.
What is the proper treatment?

• A – Nephrectomy
• B – Nephron Sparing Surgery
• C – Biopsy of the tumor and decision (w.w. or surgery)
• D – Radiofrequency ablation
• E – Watchful waiting
Partial nephrectomy was chosen

- A Non-Cancer-Related Survival Benefit Is Associated With Partial Nephrectomy
  
  *Sun M., Trinh QD et al.* EUROPEAN UROLOGY 61 (2012) 725-731

- Partial nephrectomy versus radical nephrectomy in patients with small renal tumors—is there a difference in mortality and cardiovascular outcomes?
  

- A prospective, randomised EORTC intergroup phase 3 study comparing the oncologic outcome of elective nephron-sparing surgery and radical nephrectomy for low-stage renal cell carcinoma.
  

  Management of locally recurrent renal cell carcinoma after partial nephrectomy.

• Laparoscopic NSS was performed. „Warm time” ischemia 19 min.

• Pathology: RCC (clear cell) G-3, surgical margin not less than 3 mm. pT1

Any indications for systemic treatment?
Surveillance was chosen. Check up every 6 months.

- After 6 months: CT abdomen, Chest X - ray - normal. Creatinine 1,6 mg/dl
- 1st year: as above
- 2nd year: CT abdomen normal but on CXR (confirmed by CT) multiple metastatic nodules in both lungs.
Metastatic Potential in Renal Cell Carcinomas < 7 cm: Swedish Kidney Cancer Quality Register Data

Fig. 4 – Occurrence of lymph node and/or distant metastases relative to tumor size in 2018 patients with renal cell carcinoma. The dashed lines show upper and lower limits of the 95% confidence interval.

Is surveillance an option for the treatment of small renal masses?
• Is patient suitable for systemic treatment?

• Do we need to perform nephrectomy?
Suprise!