Safety and Efficacy of EUS-RFA for adrenal tumor

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Introduction: EUS-RFA

- Best combination of real-time visualization and precise localization
- Minimally invasive treatment
- May have higher rate of complete tumor necrosis
- Potential as a palliative and curative tool
Introduction

• Only 2 case reports demonstrated the feasibility of EUS-RFA for adrenal tumor
• This study aims to evaluate the efficacy and safety of EUS-RFA for adrenal tumor
Methods

• Four patients with adrenal adenoma who underwent EUS-RFA between May 2017 and June 2019 were included.
• The inclusion criteria were: (i) adrenal tumors identified on CT or MRI (ii) patients who refused surgery or had a high surgical risk.
• EUS-RFA was performed using 19-gauge RFA needle with RF generator and prophylactic antibiotics were administered.
• The treatment response was classified as complete response (CR) or partial response (PR).
<table>
<thead>
<tr>
<th>Case</th>
<th>Sex/Age</th>
<th>Tumor site</th>
<th>Tumor size (cm)</th>
<th>Session of RFA</th>
<th>Response</th>
<th>Complication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case 1</td>
<td>M/38</td>
<td>Left</td>
<td>1.9</td>
<td>#2</td>
<td>PR</td>
<td>None</td>
</tr>
<tr>
<td>Case 2</td>
<td>M/61</td>
<td>Left</td>
<td>2.4</td>
<td>#2</td>
<td>PR</td>
<td>None</td>
</tr>
<tr>
<td>Case 3</td>
<td>M/71</td>
<td>Left</td>
<td>1.7</td>
<td>#1</td>
<td>CR</td>
<td>None</td>
</tr>
<tr>
<td>Case 4</td>
<td>M/81</td>
<td>Left</td>
<td>2.8</td>
<td>#2</td>
<td>PR</td>
<td>None</td>
</tr>
</tbody>
</table>
Results: Case 1

M/38
Tumor size: 1.9cm
RFA session #2
Partial response
No complication
Results: Case 2

M/61
Tumor size: 2.4cm
RFA session #2
Partial response
No complication
Results: Case 3

M/71
Tumor size: 1.7cm
RFA session #1
Complete response
No complication
Results: Case 4

M/81
Tumor size: 2.8cm
RFA session #2
Partial response
No complication
Conclusions

• Patients of the four cases showed response.
• EUS-RFA for adrenal tumor is technically feasible without severe complications
• Further studies are required to improve the treatment response as only one case showed complete response