Treatment of Hepatocellular Carcinoma with Combination TACE+MW Ablation versus TACE Monotherapy: A Lesion-by-Lesion Analysis

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OBJECTIVES
- Baseline Child Liver Cirrhosis (BCLC) guidelines provide distinct indications for the treatment of Hepatocellular carcinoma (HCC) based on size and liver function.
- Thermal ablation is accepted treatment of choice (C) or (A).
- Transarterial chemoembolization (TACE) remains the standard of care for monotherapy of HCC in patients who are not candidates for surgical treatment.
- Other, operator preference and experience plays a large role in the selection of Therapeans outside of established guidelines.

METHODS
- Our International Theratology database was retrospectively reviewed from 2008 to 2014.
-治疗 was performed with a standard chemotherapy cocktail of Adriamycin, doxorubicin, and lipiodol.

RESULTS

Table 1: Categories of Disease Response according to mRECIST

<table>
<thead>
<tr>
<th>Response Category</th>
<th>mRECIST</th>
<th>Arterial Enhancement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Response (CR)</td>
<td>No arterial enhancement</td>
<td></td>
</tr>
<tr>
<td>Partial Response (PR)</td>
<td>Arterial enhancement decreases the unidimensional diameter of arterial enhancement</td>
<td></td>
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<tr>
<td>Stable Disease (SD)</td>
<td>Arterial enhancement that does not qualify the treated tumor site which has retained lipiodol (C, dashed black arrow) consistent with LTP/PR.</td>
<td></td>
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</tbody>
</table>

Table 2: Descriptive Measures of the Treatment Groups

<table>
<thead>
<tr>
<th>Treatment</th>
<th>mRECIST</th>
<th>HCC</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>TACE</td>
<td>75 (15)</td>
<td>25 (5)</td>
<td>0.045</td>
</tr>
<tr>
<td>TACE+MW</td>
<td>70 (7)</td>
<td>30 (3)</td>
<td>0.045</td>
</tr>
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</table>

Table 3: Local Tumor Progression and mRECIST Response after Treatment

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CONCLUSIONS

- This effect was particularly pronounced in the intermediate size tumors (range 3-4 cm).
- Combination TACE+MW therapy was associated with a decreased rate of LTP and an increased rate of CR when compared to TACE alone.
- Given the particularly pronounced results in the 3-4 cm size range, this combination approach may be of particular advantage when treating disease in this intermediate area where conventional monotherapy approaches overlap and the indications for one over another are indistinct.

REFERENCES

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Figure 1
- 64-year-old male with a 3.6 cm HCC (A). The patient received TACE monotherapy with arterial enhancement (B) from TACE. Follow-up CT 7 months later with diffusion weighted imaging (DWI) (C) demonstrates diffuse lipiodol uptake in the tumor (B, black arrow) and follow-up CT (white arrow, C) consistent with LTP/PR.

Figure 2
- 64-year-old male with a 3.6 cm HCC (A). The patient received TACE monotherapy with arterial enhancement (B) from TACE. Follow-up CT (white arrow, C) consistent with LTP/PR.

Figure 3
- 64-year-old male with a 3.6 cm HCC (A). The patient received TACE monotherapy with arterial enhancement (B) from TACE. Follow-up CT (white arrow, C) consistent with LTP/PR.

Figure 4
- 64-year-old male with a 3.6 cm HCC (A). The patient received combination TACE+MW therapy. TACE was performed followed by MW at a target date of 2 weeks later.