

Peer Review File

Article information: <http://dx.doi.org/10.21037/ls-20-107>.

Reviewer 1

Comments to the authors:

1. The authors provide an interesting overview over their work and that of other groups concerning techniques and results for stereotactic thermal ablation of liver tumors. The structure of the paper is concise and easy to follow. I concur with the authors that refined interventional methods such as stereotactic ablation will gain importance in the future and might become a dominant treatment method for these diseases. However, when comparing interventional treatment methods with surgical treatment of liver tumors certain important differences should be mentioned, e.g. surgical treatment provides an advantage in comparison to interventional techniques regarding histological verification of tumor type and resection margin. Evidence based treatment of some tumors, for instance cholangiocellular carcinoms, requires surgical resection of certain lymph nodes. How would you address this in the setting of an interventional treatment plan? Please discuss this further.

Reply: Concerning histological verification of tumor type we included the following sentences:

The positioning of coaxial needles also allows for biopsy taking of each tumor. Similar benefits were described by H Ishizaka et al [17] on their communications on the use of coaxial needles for CT guided ablation.

Reply: Concerning resection margin we had already included the following sentences:

After hot probe withdrawal, a contrast-enhanced CT in arterial and portal venous phase is acquired. The superimposition of the control-CT to the planning CT allows checking whether the ablation zones cover the tumors with a sufficient safety margin (Figure 2).

Reply: Concerning resection of lymph nodes we included the following sentence:

It is worth mentioning, that the use of ablation for treatment of the primary tumor doesn't preclude the lymphadenectomy -minimally invasive or open- whenever it adds value for either staging or in the oncologic outcome.

2. Please check for some minor grammar and spelling mistakes.

1. Line 24: add "for" after "treatment"

Reply: Done

2. Line 39: The sentence starting with "Second, ..." should be revised

Reply: Done

3. Line 347: The paragraph is misleading. You are comparing interventional treatment, minimally invasive surgery, and open surgery. Maybe it would be more feasible to bring up an argument that both interventional methods as well as minimally invasive surgery will replace open surgery - both complementing each other.

Reply: We have added the following sentences:

Addressing the question in the title, do we believe that ablation will replace minimally invasive surgery for cancer treatment? The short answer is no; ablation will be a great first line option, like minimally invasive surgery is. Ideally, the usage of both minimally invasive approaches -which are complementary and can even be combined in many cases- will decrease our reliance on open surgery.

4. Line 372: please see comment above. The discussion might benefit from a partial rewrite combining the aforementioned paragraphs.

Reply: We have partially rewritten the paragraphs:

Addressing the question in the title, do we believe that ablation will replace minimally invasive surgery for cancer treatment? The short answer is no; ablation will be a great first line option, like minimally invasive surgery is. Ideally, the usage of both minimally invasive approaches -which are complementary and can even be combined in many cases- will decrease our reliance on open surgery. It is worth mentioning, that the use of ablation for treatment of the primary tumor, doesn't preclude the lymphadenectomy -minimally invasive or open- whenever it adds value for either staging or in the oncologic outcome. The point is having an arsenal of treatments to always offer the best possible option for the specific disease and underlying conditions of the patient.

Reviewer 2

Comments to the authors:

1. This is an excellent manuscript provided by the leading pioneers of navigated stereotactic RF ablation in Europe. I would suggest discussing how to proceed with lymph node histologic sampling. Hybrid interventions? Lap LN sampling, liver packing, RF ablation of the intraparenchymal liver lesion? RF cant be performed in the rare entity of pCCA. iCCA however may be subject to RFA.. pending LN sampling..

Reply: see also above (Reviewer 1):

It is worth mentioning, that the use of ablation for treatment of the primary tumor, doesn't preclude the lymphadenectomy -minimally invasive or open- whenever it adds value for either staging or in the oncologic outcome.

2. Please also correct spelling mistakes and typos.

Reply: We corrected all spelling mistakes and typos.