CORRESPONDENCE

Clinical Practice Guideline: The Diagnosis and Treatment of Hepatocellular Carcinoma

by Prof. Dr. med. Nisar P. Malek, Dr. med.Sebastian Schmidt, Petra Huber, Prof. Dr. med. Michael P. Manns, and Prof. Dr. med. Tim F. Greten in issue 7/2014

SIRT Was Given Short Shrift

The acronym SIRT stands for selective internal radiation therapy. At the present time, 19 completed studies and 20 ongoing studies are registered in ClinicalTrials.gov. Three of the studies are randomized multicenter phase III studies (SORAMIC, SIRveNIB, SARAH) at stages Child-Pugh A–B, whose follow-up results are expected for 2015–2017. The 5th SIRT symposium (the 5th European Multidisciplinary Symposium on Liver-Directed Cancer Therapy using ^{90}Y Microspheres) yielded the following insights regarding SIRT. SIRT was found to be the best therapeutic option in the setting of large tumors and portal vein invasion, since TACE had substantially more adverse effects and was much less effective. Furthermore, SIRT is being discussed as the first-line therapeutic approach for the purpose of downsizing HCC, in order to facilitate resectability. The data of the London based oncologist H Wasan, on the therapeutic effectiveness and cost effectiveness of SIRT, are interesting. Compared with chemoembolization, SIRT is less toxic, and the costs/QALY, which are reported to be €30 000–40 000, were found to be lower in one third of cases. By contrast, the costs/QALY of systemic therapy amount to €182 000 (cetuximab), €105 000 (bevacizumab), €71 000 (regorafenib), and €90 000 (sorafenib). Quality of life data after treatment are more favorable for SIRT than for TACE ($p = 0.019$), the time to progression is 8.4 months for TACE and 13.3 months for SIRT. The overall response rate for SIRT was reported to be 44–91%. These findings, which are also available for other tumor entities (1–3), justify cautious optimism regarding the expected study results and the effect in terms of the future importance of radioembolization in guidelines.

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Conflict of interest statement
The author declares that no conflict of interest exists.

In Reply

SIRT does indeed constitute a new therapeutic option for the local treatment of advanced HCC at the intermediate stage. The 2013 guideline from the German Society for Digestive and Metabolic Diseases (Deutsche Gesellschaft für Verdauungs- und Stoffwechselerkrankungen, DGVS) recommended further investigation of this method, especially compared with transarterial chemotherapy (TACE), which is well established and has been evaluated in clinical studies. Currently, only few studies exist that undertook a direct comparison of these methods among themselves or in combination with sorafenib. Salem and colleagues showed that in 291 patients who had been treated with yttrium microspheres, liver function and the presence of portal vein thrombosis were the most important parameters for survival. An advanced study (Salem et al, 2011) showed in a comparison of SIRT and TACE a longer time to progression in the SIRT group (13.3 months vs 8.4 months), however, the difference in median survival between the two groups did not reach significance (20.5 months vs 17.5 months). Furthermore, it became obvious that more than 1000 patients would have had to have been recruited into the study in order to show a significant difference. In future this will be realized only by conducting large multicenter studies. We live in hope that the value of SIRT for the treatment of diffuse tumors and in portal vein thrombosis will be confirmed in appropriate studies. A comparison of the treatment costs for SIRT and for newer medications (sorafenib, avastin, etc.) is currently not the main issue, as palliative drug treatment is employed only in patients who are not eligible for locoregional treatment.

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