

The road to cancer control

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The era when cancer is an incurable disease is coming to an end. Numerous studies on cancer have been performed in various fields. These studies have led to exceptional therapeutic technologies that have in turn increased the survival rate for patients and improved their quality of life. Hepatocellular carcinoma (HCC), which accounts for 94% of primary liver cancer, is no exception. According to a report on the 18th Follow-up Study of Primary Liver Cancer in Japan by the Liver Cancer Study Group of Japan, the 5-year survival rate for HCC patients overall from 1996 to 2005 was 39.3%, and this rate has almost quadrupled from the rate 20 years ago (9.5%). Needless to say, this prolonged survival was due in part to the development of surgical resection techniques and novel medical therapies. Japan has a number of doctors with world-class ability in providing various therapies, and these doctors underpin Japan's advanced medical care for HCC patients.

The most important goal of current HCC medical care is to provide appropriate therapy in accordance with each patient's condition. In 2005, an expert panel led by our research group crafted the Clinical Practice Guideline for HCC (J-HCC Guideline) with the support of the Ministry of Health, Labor, and Welfare of Japan. This guideline was devised based on the internationally standardized methodology of evidence-based medicine. In accordance with uniquely devised methods of evaluating evidence, highly valuable research results were identified from an enormous quantity of past clinical studies. Deliberations by experts in various field and overall evaluation led to 'recommendation of a single medical care strategy' and 'the strength (reliability) of that recommendation or evidence'. The role of this guideline, therefore, is only to provide a policy for typically recommended forms of medical care when providing that care pursuant to the policies of individual hospitals and doctors and in

accordance with patients' wishes. Combining standard treatment strategies supported by scientific evidence and individual treatment approaches will lead to the best medical care for each patient. Furthermore, the guideline is based on results of numerous clinical studies, so the evidence is sure to be the latest available. Since its publication in 2005, the J-HCC guideline was revised in 2009. Various clinical studies are steadily underway at this very moment. Our study group started 'Surgery versus radiofrequency ablation for small hepatocellular carcinoma: Start of a randomized controlled trial (SURF trial)' together with a number of other facilities in an attempt to craft highly reliable evidence for a standard strategy of treating HCC in cases where deciding that strategy is difficult. In the area of chemotherapy, the current reality is that there are few highly effective ways of treating HCC. That said, the multi-kinase inhibitor 'Sorafenib' was approved for the treatment of unresectable HCC in May 2009. Results of clinical studies of sorafenib that are underway at many hospitals will be publicized in the near future. Thus, consolidation and verification of the results of using existing therapies and the development of novel therapies will lead to further progress in the treatment of HCC.

From an epidemiological perspective, Japan and the rest of Asia have one of the world's highest levels of incidence of HCC, and then increase in morbidity and mortality due to HCC is increasingly serious. Continued advances in medical technology to treat HCC in Japan will greatly affect HCC treatment in this country and in other countries as well, so Japan has a crucial role in disseminating its exceptional medical technology and medical systems.

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