Results and Possible Productiveness of Comparative Study with Overseas Hospitals

To the Editor:

I had the opportunity to visit three institutions (Pittsburgh Transplantation Institute, Pittsburgh, PA, USA; Hôpital Paul Brousse, Université Paris Sud, Cedex, Paris, France; and Friedrich-Schiller-Universitat, Jena, Germany) in three different countries for three months from March to May of 1998. It was supported by a fellowship program from the Foundation for Promotion of Cancer Research. The purpose of these visits was to observe the daily clinical practice in the foreign hospitals and to compare the treatment results of our hospital to theirs.

My first concern is the question as to whether hepatocellular carcinoma (HCC) should be treated with hepatic resection or orthotopic liver transplantation. The comparison of outcome after hepatic resection (Hx) for HCC and that after orthotopic liver transplantation (OLTx) have been discussed without definite conclusions in several reports, mainly because of the small numbers of early stage HCCs treated by Hx in western countries (1-4). To the contrary, in Japan, where we had a brand-new brain death and organ donation law about six months ago, we have had many patients with early stage HCC treated by Hx but have not had any experience of cadaveric liver transplantation. Professor S. Iwatsuki was ready and willing to prepare their data of the patients who underwent OLTx for HCC. Therefore, the database of the National Cancer Center Hospital, Tokyo and that of the University of Pittsburgh Medical Center, USA (where they have the greatest experience of OLTx for HCC in the world) were exchanged, and the 294 cirrhotic patients who had curative Hx and the 270 cirrhotic patients who had curative OLTx for HCCs were selected for comparisons. The influences of various prognostic factors upon patient and tumor-free survivals were examined. In addition, with assistance of Dr. I. Dvorchik in statistical analyses, who is a project leader of the Department of Biomedical Informatics, I tried to make clear the role of each strategy for the treatment of HCC which coincided with cirrhotic liver. Overall patient survivals were similar between the Hx group and the OLTx group. When the patient survivals were compared in early stage HCCs (without macroscopic vascular invasion, lymph node invasion, and distant metastasis), the survivals after OLTx were significantly higher than those after Hx. However, this difference was not significant between the Child-Pugh grade A patients (the patients with excellent liver functional reserve) in the Hx group and all cirrhotic patients (majority in grade C (the patients with poor liver function)) in the OLTx group. Thus, when recurrent tumors were aggressively treated with re-resection, ethanol injection or arterial chemoembolization, survivals after Hx for HCC in well-compensated cirrhosis of the liver were as good as those after OLTx. We concluded that, in the era of organ shortage, such HCCs should first be treated with Hx, and OLTx should be selectively applied for those with tumor recurrence and/or progressive hepatic failure.

To observe the clinical practice and outcome of hepatic resection for liver metastases was the next main purpose. I presented our results of hepatectomy for colorectal metastases and discussed the results in Germany. We have experienced more than 400 resected cases of colorectal liver metastases up to the present and the overall survival after 1st hepatectomy for colorectal cancer was 48% (5). This time I analyzed the 75 patients who underwent repeat hepatectomy for colorectal cancer recurrence. The frequency of 2nd hepatic resections for recurrent hepatic colorectal metastases in our series was 18% (63 out of 345 patients having 1st hepatectomy in our hospital) of those initially resected. The post-resection outcome (5-year survival rate = 47%) was well comparable to that of initial resection. Professor J. Scheele has the largest resected series of colorectal liver metastases in the world (6) and he had about 50 cases of repeat hepatic resection for the recurrence of colorectal cancer. In their series, they had survivals of more than 50% after 2nd hepatectomy better than those after 1st hepatectomy. Because their technique of liver resection is principally the same as ours, the patient selection may make the difference. Thus, I believe that the comparative study will be productive in standardizing the treatment for colorectal liver metastases.

References


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