

LV SY 3-4**Contemporary outcome of liver transplantation for bilobar multiple colorectal liver metastasis****Pål-Dag LINE***University of Oslo, Norway*

Lecture : During the last decade, increasing evidence suggest that highly selected patients with colorectal liver metastases (CRLM) can obtains superior survival by liver transplantation. Three scoring systems may be utilized to predict post transplant survival in CRLM. Pre transplant factors associated with unfavorable outcome are maximal tumor diameter > 55mm, CEA > 80 micrograms/ml, unresponsiveness to chemotherapy and a time interval from diagnosis to transplant less than 24 months. These 4 factors are assessed in the Oslo Score, and scores from 0-2 yield a 5-year overall survival of about 67-70%. Further refined selection include the metabolic tumor volume (MTV) at PET CT. This is defined as an uptake of 40% of standardized maximal uptake (SUVmax). Calculated per patient as the sum of MTV in all lesions, a MTV value < 70 cc is associated with post transplant survival of 78%. The Fong Clinical Risk Score (FCRS) offers an even more stringent selection of candidates and scores of 0-2 have in the published literature demonstrated 100% 5-year overall survival.

Caution against transplantation is advised in patients with right sided primary tumors, undifferentiated og signet ring cell differentiation, N⁺ status of the primary og BRAF mutation. The outcomes referenced are probably not limited only to non-resectable CRLM. It is therefore possible that some few patients currently offered liver resection could have a clinically significant treatment benefit by liver transplantation, but future studies are needed to clarify this question.

Since CRLM patients, by definition have metastatic disease, recurrence remains a problem. Thus, assessing the balance between survival and recurrence after transplantation remains a difficult dilemma. About two thirds of the recurrences are slow growing lung metastases. The experience to date indicates that pulmonary recurrence alone has a modest impact on survival outcomes, since many of them can be resected with curative intent. Further studies focusing on this group of patients will be important for the development of this field of transplant oncology.

Liver transplantation for secondary liver tumors should be implemented in accordance with stringent transplant criteria and preferably in the context of prospective trials. Expansion of the donor pool by utilizing extended criteria donors , partial liver transplantation and possibly living donor liver transplantation could be considered for this indication.