Colorectal liver metastases: case re-evaluation by a panel of liver surgeons to improve treatment strategy.

T. Hellingman¹, M.E. de Swart¹, B.M. Zonderhuis¹, J.J.A. Joosten³, M.R. Meijerink², D.J.A. Sonneveld³, M.P. van den Tol¹, J.W. de Waard³, G. Kazemier¹

<u>Background:</u> Local treatment of colorectal liver metastases (CRLM) has improved survival of patients with stage 4 colorectal cancer. Decisions on treatment strategy are made at general oncological multidisciplinary team (MDT) meetings, with teleconference to discuss. Nevertheless, the team often lacks specific expertise when to refer patients for curative intent therapies. The aim of this study is to evaluate the benefit of a panel of liver surgeons to increase the number of patients that can be treated with curative intent.

<u>Methods:</u> All patients diagnosed with liver-only CRLM between 1^{st} of January 2016 and 31^{st} of December 2016 were retrospectively identified in a tertiary hospital and general teaching hospital with expertise in liver surgery in the Netherlands. Patients who underwent successful local treatment after being discussed during an MDT meeting in presence of a liver surgeon or with extrahepatic disease were excluded. Diagnostic imaging was independently reviewed by 4 liver surgeons to reassess treatment strategy. If ≥ 2 liver surgeons assessed all lesions eligible for resection or ablation, patients were deemed eligible for local treatment of CRLM.

<u>Results:</u> Diagnostic imaging of 56 patients was reviewed. Three out of twenty patients (15%) initially eligible for (palliative) systemic therapy were deemed eligible for local treatment with curative intent (p = 0.07). Interrater reliability was substantial (ICC = 0.682, 95% CI: 0.490-0.838, p < 0.001).

<u>Conclusion:</u> Assessment of diagnostic imaging from patients with CRLM by an expert panel may result in an increase of patients eligible for treatment with curative intent.

¹ Amsterdam UMC, location VU University Medical center, Department of Surgery, The Netherlands

² Amsterdam UMC, location VU University Medical center, Department of Radiology, The Netherlands

³ Westfriesgasthuis hospital, Hoorn, Department of Surgery, The Netherlands