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The histological growth pattern and the clinico-metabolic characteristics accurately predict the outcome in patients undergoing surgery for colorectal liver metastases - Belgian Group for Digestive Oncology (BGDO)

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Introduction : Selection for surgery in patients with colorectal liver metastases (CRLM) remains poorly personalized. We evaluated whether the combination of clinico-metabolic characteristics with the histological growth pattern (HGP) of CRLM could improve the prognostication in individual cases.

Methods : In a series of 108 patients undergoing resection of CRLM, the HGP of CRLM was scored according to international guidelines. A baseline metabolic-Clinical Risk Score (mCRS) was calculated by adding the 18FDG-PET/CT scan data as a parameter to the traditional Memorial Sloan Kettering CRS.

Results : In patients with desmoplastic HGP (DHGP) CRLM (20% of all patients), 5- and 10-years OS and DFS were 66% and 43% and 37% and 24.5%, as compared with 35% and 21% and 11% and 11% in the non-DHGP group (p=0.07 and 0.054). Among DHGP patients, those with a low-risk mCRS had significantly improved postoperative outcomes, 5- and 10-years OS and DFS reaching 83.3% and 62.5% and 50% and 33%, as compared with 18% and 0% and 0% and 0% in high-risk mCRS patients (p=0.007 and 0.003). In contrast, mCRS did not influence the postoperative survivals in non-DHGP patients.

Conclusions : Combining the clinico-metabolic characteristics with the HGP may improve prognostication in patients undergoing surgery for CRLM.

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