

Guillaume Passot

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MD Anderson, Houston

Kenneth Warren Fellowship 2015 early report: research.

Dear IHPBA research committee,

It is a great honor to receive this grant and I would like to thank the IHPBA Research Committee for awarding me the 2014-2015 Kenneth Warren Fellowship. The grant supports a study evaluating micrometastases in patients undergoing resection for colorectal liver metastases (CLM) under the mentorship of Dr. Jean-Nicolas Vauthey, at the University of Texas M.D. Anderson Cancer Center.

Several clinical, biological and pathological factors are associated with recurrence within the liver and a worse overall survival: Ras mutation ^{1,2}, number and size of CLM ³, pathological response to chemotherapy ⁴. Micrometastases defined as separate satellites tumor only seen upon microscopic evaluation of CLM are reported to be present in up to 60% of patients ⁵. Micrometastases are believed to be responsible for local recurrence at the resection margin after curative resection ⁶ and may be associated with survival. We hypothesize that the presence of micrometastases represents biologically and clinically different patterns of liver metastases. We expect that better characterization of colorectal liver metastases with micrometastases will help in the selection of patients and treatments.

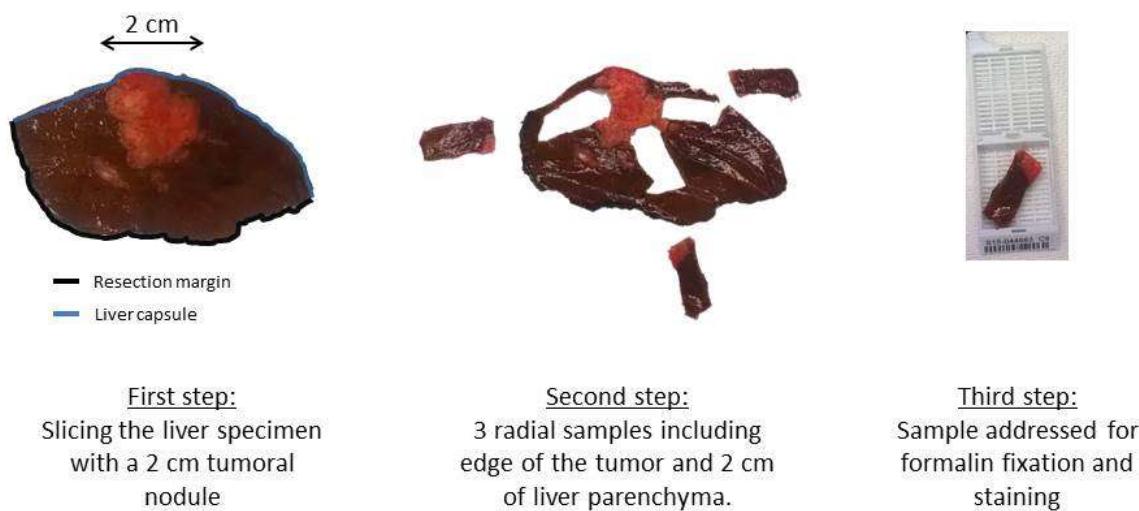
No standardized pathological evaluation of micrometastases has been reported. The first step of the study was to determine and validate a standardized pathological analysis for micrometastases. The pathological analysis was carried out on sectioned liver specimen with 5mm thick slices. Sufficient amount of “normal” surrounding parenchyma has to be evaluated as micrometastases have been found up to 17mm from the edge of the gross tumor ⁷. Regarding tumor size, 3 to 8 cassettes were obtained radially from the fresh specimen. The liver sample in each cassette includes the edge of the gross tumor and 2 cm of normal liver (Figure 1). All

samples are formalin fixed, embedded in paraffin block and stained with Hematoxylin-Eosin. A microscopic analysis is then performed to determine the presence of micrometastases and the distance between the gross tumor and the micrometastases.

Feasibility of this standardized evaluation of micrometastases has been confirmed on 20 consecutive specimens, but no evaluation of micrometastases has been done yet. I look forward to presenting the completed study at the IHPBA clinical Congress in 2016.

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Figure 1: Pathological sampling for micrometastases analysis.



References

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