

**ABST-0031**

## **Liver Remnant (FLR)assessment After Major Hepatectomies With Liver Volumetry Using Ct And Functionality Evaluation With Single Photon Emission (SPECT)computed Tomography-hepatobiliary Scintigraphy (HBS**

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**Background** : HBS is used as a method to evaluate liver function. SPECT has allowed a more accurate measurement of it.

**Methods** : Prospectively, Since 2017, we perform a CT volumetry and SPECT-HBS in all mayor liver resections excluding left hepatectomy with non-compromised FLR. The SPECT-HBS will assess FLR function(FLR-F) with FLR%, De Graaf (< 2.7% / min / m<sup>2</sup>) and HIBA-Index(15%) (below those index it could be related to higher rates of liver failure, LF). LF is measured by IGSLs.

**Results** : A total of 56 patients were included, 6 of them being excluded preoperatively (progression).Cholangiocarcinoma was the most common diagnosis (58%). 56% were female with a median age of 71 years. 20% had portal vein embolization. In 14% ALPPS was performed. The median FLR and FLR% were 632g and 44% . The median FLR-F was 43% , median FRL-F and HIBA index were 2.78%/min/m<sup>2</sup> and 22.5%. 59.5% had a De Graaf and 32.6% a HIBA-index below the cutoff values . 22% had postoperative morbidity, 4% were ≥ IIb. Those two patients (4%) that showed post-resection liver failure had De Graaf below the cutoff value (2.2%/min/m<sup>2</sup>) but HIBA-index(17%-26%) above it, both associated to postoperative portal thrombosis.

**Conclusions** : Patients with a De Graaf index <2.7 %/min/m<sup>2</sup> and a HIBA index <15% did not develop LF in our study . The two LF had a direct relationship with technical postoperative portal thrombosis. The current cut-off of FLR-F measured with De Graaf and HIBA index did not estimate the risk of postoperative LF in our study.

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