

# Effectiveness and Safety of Liver Surgery in Primary Liver Tumors and Liver Metastasis to Improve Quality of Life A Retrospective Analysis of 209 Cases in a 6 Years Period

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## Objective

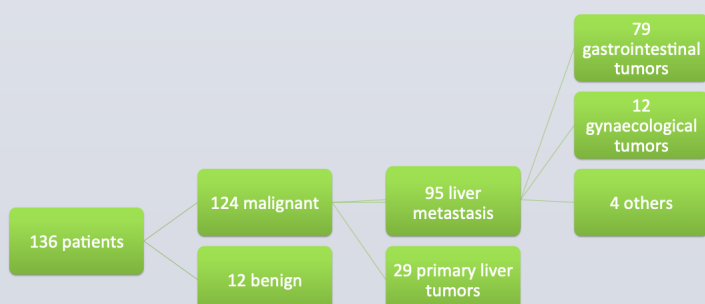
To determine efficiency and safety of liver surgery and liver interventions in patients with primary liver tumors and metastasized carcinoma.

## Methods

Retrospective analysis of 209 cases or 136 patients (62 female / 74 male) in the age between 29-87 years (mean 58 ± 29 years), which represents the total population during an observation period of 6 years and 8 months in a private practice environment. Endpoints measured were complications, interventions needed and hospital mortality (90 days).

## Results

A total of 209 surgical interventions in 136 patients were conducted. While 12 of the 136 cases were benign, the majority manifested with malignant diseases (n=124). 29 patients with malignant entities presented themselves with primary liver tumors (HCC&CCC), while 95 patients suffered from other primary carcinoma with liver metastasis, of which 83.2% (n=79) were gastrointestinal tumor (41 colon carcinomas, 12 pancreatic carcinomas, 12 rectum carcinomas, 14 others), 12.6% (n=12) showed primary gynaecological tumors and 4% (n=4) others. A total of 126 segmentectomies, 153 non-anatomical wedge resections, 44 hemihepatectomies, 8 central hepatectomies and 112 ablations were performed. Multiple patients underwent several planned interventions during the period to remove recurrent tumors.



With a primary survival rate of 97.3% the interventions show a high success rate. 2 patients died during hospitalisation after highly complex surgical interventions (both multiple organ resections). A total of 9 patients needed further surgical interventions. 19.1% (n=40) of all interventions showed minor complications that did not influence the outcome.

## Therapy of postoperative complications

	OP	Drainage	ERC / Stent	Conser- vative
Liquid collection / biliary leakage	2	26	5	7
Postoperative bleeding	2			
Bile duct stenosis			1	
Others (pancreatic fistula, burst abdomen, pleural effusion)	5	1		
Infection				3
<b>Total</b>	<b>9</b>	<b>27</b>	<b>6</b>	<b>10</b>

## Conclusion

In the hands of experienced surgeons, resection of hepatic tumors and metastasis is a safe intervention with relatively low complication rates. Even patients with multiple metastases or locally advanced cases tolerate multiple interventions under a well balanced therapy regimen. However, increased morbidity and mortality can be observed related to tumor mass and extent of resection (combined organ involvement with multi visceral resection, e.g. central blood vessels, pancreas, lung). Liver surgery is not only an option for curative intentions, but also in a palliative state, to enhance quality of life or to prolong life.