Liv 22**DIFFERENTIAL THERAPY OF INTRA-AND EXTRAHEPATIC BILE DUCT CANCER**

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From 1979 to 1984 80 patients were treated at the Chirurgische Universitätsklinik Münster for carcinoma of the intra- or extrahepatic bile ducts. The tumor was located in the gallbladder most frequently (31=37,8%). Altogether, the rate of curative resections amounted to 9 out of 80 (11,3%). Among these were four microcarcinomas of the gallbladder as an incidental finding after cholecystectomy and two Whipple operations in distal choledochal cancer. Cholecystectomy (48,3%) and T-tube drainage (51,3%) were the most frequent palliative procedures. 20 patients were treated by endoscopic pig-tail implantation preoperatively, in 18 of these the bilirubin level was lowered by this kind of treatment. 12 of 80 patients died during the postoperative period (15,0%). Mortality was not higher for patients operated upon before. PTT and PTZ were good prognostic factors for the postoperative outcome; both were significantly higher in the patients dying postoperatively. Liver metastases and infiltration of surrounding structures were the most important reasons preventing curative resection. Liver metastases were present in 33,8%(27/80). Direct infiltration of the liver was found in 29/80 patients (36,3%). Infiltration of the hepatoduodenal ligament occurred in 14 patients (17,5%). By and large, therapy of bile duct cancer usually can only be palliative. The results of endoscopic treatment are going to change the indications for surgery. The different indications for both are dependent on the patients general state and the symptoms he is presenting with. The different indications for endoscopic and operative treatment will be discussed in detail.

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Liv 23**RESULTS OF EXTENDED RIGHT HEPATECTOMY IN THE TREATMENT OF PRIMARY AND SECONDARY LIVER MALIGNANCIES.**

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Extended right hepatectomy, referred to in American literature as trisegmentectomy (STARZL, Pittsburgh) - means the resection of the entire liver lobe and the medial segments of the left liver lobe. Although this operation was first described and successfully performed over 30 years ago, it is a technique that is rarely applied today. The fact that the technical details have been precisely described by STARZL et al. has not altered this situation. Extended right hepatectomy means the resection of 75 - 90% of the liver tissue, leaving only the portion of the liver localised left of the falciform ligament.

During the period 01.04.77 - 01.04.85, we performed this procedure on 20 patients, in 18 cases for primary and in 2 for secondary malignancies. As a special technique we used the anatomic hilar preparation, a compression of the hepatoduodenal ligament for 30 minutes and a controlled hypotension, which means a reduction of the systolic pressure to 60 mm of mercury for the same time. A blood transfusion was only necessary in 40% of the cases. There was one postoperative death, caused by liver insufficiency. We observed 6 postoperative complications: pleural effusion requiring puncture in 3, subphrenic abscess requiring drainage in 2 and a bile fistula which ceased spontaneously in one case. Our five year life expectancy rate was over 50%. Thus this procedure and technique has been proved to be highly successful and should be preferred in any case to a liver transplantation often performed under this indication.

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Hst 01**Thrombotic and hemorrhagic tendency in patients with malignant disease**

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Even before modern day knowledge of the mechanics of hemostasis Trousseau described in 1865 the appearance of venous thromboses as one of the first signs of tumor manifestation - a finding which has repeatedly been confirmed since then. Both the tendency towards thrombosis which often accompanies solid tumors and the bleeding disorders predominantly seen in hemoblastoses can be a result of the same pathophysiologic process, namely a hypercoagulable state induced by the malignant disease. The immediate elevation in the level of acute phase proteins such as fibrinogen and factor VIII are indicative of the host response to tumor growth. This initial rise in the hemostatic potential of tumor patients is augmented by certain activities of the tumor cells themselves: the tumor-associated procoagulant, tumor-induced hyperfibrinolysis, platelet activation, and malignant hypervascularization. In addition, the paraneoplastic appearance of thrombocytosis often influences hemostasis in patients with malignant disease. Out of this hypercoagulable state, however, a critical bleeding disorder can develop which is often the product of an insidious consumption coagulopathy, an immune complex mediated thrombocytopenia or thrombocytopeny, or a thrombotic microangiopathy.

In contrast to the effects of tumor induced reactive thrombocytosis, the autonomous thrombocytosis in myeloproliferative disease is associated with mostly platelet-induced bleeding disorders as well as thrombotic complications. The phenomena mentioned above can be detected by systematic examinations using sensitive methods in approximately 90 % of all cases. This was the result of our studies correlating the hemostatic activity to changes in the megakaryocyte-platelet system in patients with solid tumors and myeloproliferative diseases. The significance of the activation of hemostasis in tumor growth and the spreading of metastases and possible therapeutic consequences thereof are discussed.

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Hst 02**PREVENTION OF METASTASES BY ANTITHROMBOTIC THERAPY? A REVIEW OF THE CURRENT STATUS**

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Primary prevention of tumor dissemination can only be achieved under experimental conditions since clinically micrometastases are frequently present already at the time of tumor diagnosis. Under certain clinical circumstances the interruption of the "metastatic cascade" could be a useful therapeutic measure and therefore compounds with specific antimetastatic properties are desirable. Based on the observation that microthrombosis at the endothelial site of tumor cell lodgement plays an important role in the pathogenesis of metastases formation, antithrombotic therapy was introduced experimentally. Although initial results with various anticoagulants and fibrinolytics appeared to support the importance of fibrin formation, the data were equivocal in other model systems and the results of clinical trials were usually disappointing.

The only drugs with reproducible antimetastatic action were oral anticoagulants of the coumarin type. The present conception of their mode of action relates to their vitamin K antagonism whereby the induced hypocoagulability appears to be less important. Experimental and clinical observations suggested that coumarin anticoagulants interact with established micrometastases by inhibiting their growth and/or their further spread.

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