SUMMARY

Primary and secondary liver cancers affect a large group of patients, and the incidence of these diseases is gradually increasing. Hepatocellular carcinoma (HCC) is the most common type of primary liver cancer. It is the fifth most common cancer and the third most common cause of death in cancer patients. Secondary liver cancers are diagnosed 20 times more frequently than primary cancers. Liver metastases are usually caused by colorectal cancer, which is the second most common cancer diagnosed in women and the third in men. Despite the ongoing advances in the treatment of primary and secondary liver cancers, therapeutic outcomes are still unsatisfactory, which is largely due to late diagnosis.

The aim of the presented study was to evaluate: the incidence of primary liver cancer in a population in north-eastern Poland in the last five years, the correlation between predictive factors and the incidence of primary liver cancer, the severity of lesions in patients with HCC, the value of AFP in the diagnosis of HCC in relation to predictive factors for this cancer, efficacy of therapies used for HCC, the incidence of secondary liver cancers, as well as the options and efficacy of surgical treatment in patients with secondary liver cancers.

The study population comprised 160 patients with liver cancer (52 women and 108 men). HCC was diagnosed in 94 patients: 24 women (age 35-83 years; mean 68) and 70 men (age 30-84 years; mean 62). The second group comprised patients (n=66) with malignant liver tumours other than HCC: 28 women (age 39-83 years) and 38 men (age 45-84 years).

The incidence of HCC was analysed in terms of patient age and sex, existing infection with HCV, HBV, cirrhosis in patients with HCC, HCV genotypes in patients with HCC, effects of treatment for HBV on the progression of HCC, location of HCC foci in the liver, HCC metastasis, and treatment options for HCC. The correlation between AFP concentration and disease stage and coexisting pathologies was analysed. The outcomes of surgical treatment for primary and secondary liver tumours were thoroughly evaluated on the basis of the author's own experience, including the use of laparoscopic liver resection (LLR).

The study revealed an increase in the incidence of HCC in a population of patients from north-eastern Poland, and identified a special risk group of men aged over 50 years. More than 80% of patients with HCC from this region are diagnosed with cirrhosis, 35% are infected with HCV and 24% are infected with HBV. The analysis revealed that AFP is a useful diagnostic marker for HCC, and its levels correlate with portal vein thrombosis and the presence of metastases. The study demonstrated that radiofrequency ablation and liver resection provide good outcomes in the treatment of HCC, but liver transplant is still the most effective option. The most common indication for liver resection in the analysed population of patients was

metastasis caused by colorectal cancer. Percutaneous radiofrequency ablation (RFA) was the safest treatment option, and was not associated with any postoperative complications or local relapse/progression of cancer. Open RFA was associated with significantly poorer outcomes, since 14% of patients had postoperative complications and 58% had cancer progression. For open liver resection the rate of complications was 12.5%, and the progression of cancer was found in 35% of patients. Outcomes of laparoscopic liver resection and classical surgeries were comparable: cancer progression was found in 15% of patients, postoperative complications were found in 15% of cases, but for LLR the mean operation time was longer (330 min vs 240 min) and postoperative recovery shorter compared to classical procedures.