

CASE REPORT

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Management of a Patient with Difficult Cholangiocarcinoma

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ABSTRACT Cholangiocarcinoma is a bile ducts tumour and is classified into three types according to localization: intrahepatic, perihilar and distal cholangiocarcinoma. Our case is a 60-year-old male patient with obstructive jaundice, unavoidable weight loss and itchiness, which started August 2020. Magnetic resonance imaging (MRI) showed, mass was detected proximal to the main hepatic bile duct. Then, F-18 fluorodeoxyglucose uptake in the proximal bile duct was demonstrated with positron emission tomography. Initially treatment with chemotherapy was started. Endoscopic retrograde cholangiopancreatography showed no neoplastic infiltration after completion of chemotherapy treatment. On September 2021, follow up MRI cholangiography showed a new mass in segment 6 of the liver which is compatible with metastasis.

Keywords: Cholangiocarcinoma; radiofrequency ablation; drug therapy

Cholangiocarcinoma is a biliary tract tumour.¹ It is slightly more common in men than women.² The etiology is obscure, possible predisposing factors are: Caroli's disease, primary sclerosing cholangitis, industrial toxin, biliary tract disease.² According to its anatomical location, it is divided into 3 subclasses as intrahepatic (originating from the intrahepatic bile ducts), perihilar (deriving from the hilum of the liver containing the biliary fusion), and distal (extrahepatic involving hepatic and common bile duct).³ Anatomical location is essential for treatment plan which could be either surgical (for resectable), or chemotherapy (locoregional or systemic) for unresectable or unfit patients.⁴⁻⁶

CASE REPORT

A 60-year-old male patient without history of smoking or alcohol was diagnosed with obstructive jaundice in other medical center on September 7, 2020 due to itchiness, nausea, vomiting, loss of appetite and yellowish discoloration of eyes since August. At

the same period, due to an loss of 15 kg of her body weight within one month, he was referred to Trakya University General Surgery outpatient clinic. Magnetic resonance imaging showed, mass was detected proximal to the main hepatic bile duct (Figure 1).

Subsequently, a malignant lesion showing F-18 fluorodeoxyglucose (FDG) uptake was detected in the proximal common bile duct in the patient who underwent positron emission tomography (PET). Following completion of chemotherapy on February 2021, on April 2021, endoscopic retrograde cholangiopancreatography was performed, cytology of a sample taken from common bile duct was negative (Figure 2).

Repeat PET, FDG involved right lobe segment 5/6. Trucut biopsy was performed on the patient in September 2021 (Figure 3). According to the biopsy result, no neoplastic proliferation was observed. Percutaneous radiofrequency ablation therapy was performed in May 2022. Percutaneous transhepatic cholangiopancreatography was performed by inter-

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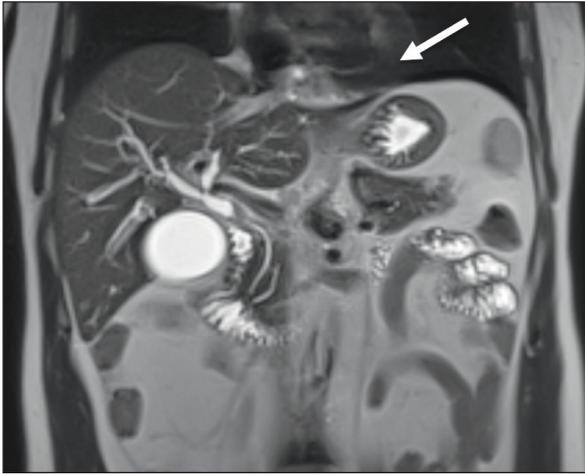


FIGURE 1: In the coronal plane T2-weighted series, soft tissue formation is observed proximal to the common bile duct, narrowing the lumen in a circular manner (white arrow).

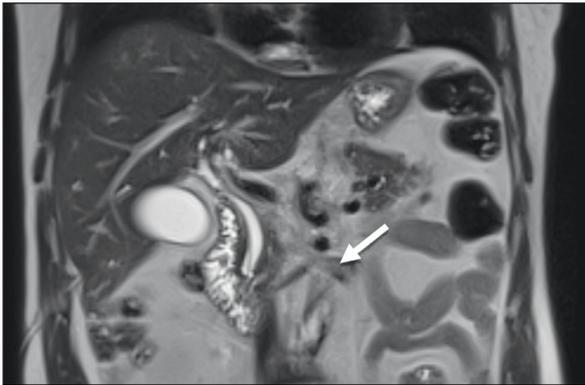


FIGURE 2: In the magnetic resonance imaging examination taken after the treatment, regression was detected in the soft tissue formation observed in the proximal common bile duct in the previous examination in the T2-weighted image.

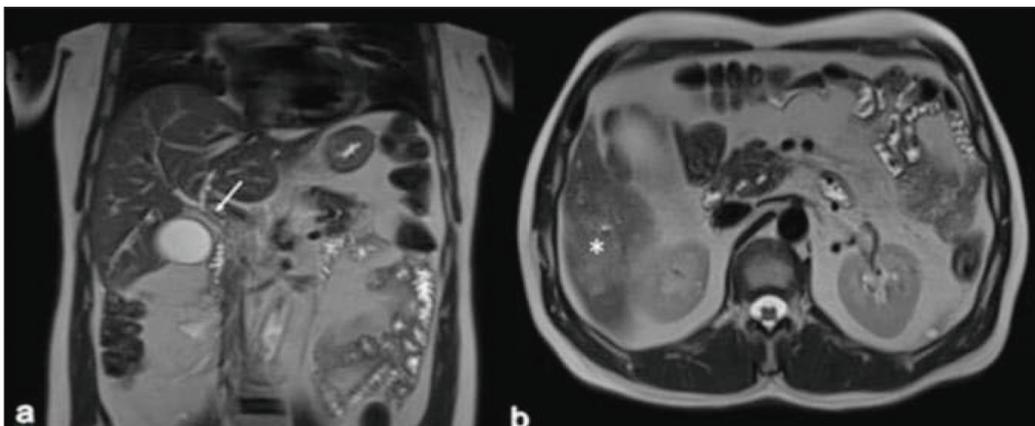


FIGURE 3: a) In the magnetic resonance imaging taken in September 2021, a progression was detected in the soft tissue formation observed in the common bile duct paroxysmal (white arrow). b) In the magnetic resonance imaging of the abdomen taken in September 2021, a mass lesion compatible with metastasis is observed in the right lobe of the liver (asterisk).

ventional radiology in July 2022. A catheter was placed into the biliary tract.

During follow up, cholecystectomy with biliary drainage was performed due to acute cholecystitis with perforation as a result of mechanical obstruction and has been followed up by our hospital.

Informed consent was obtained from the patient.

DISCUSSION

It was diagnosed as Bismuth Type 3a. The case was considered as inoperable due to comorbid conditions of the patient (hypertension, congestive heart failure). The survival of untreated and unsuitable cases is 3.9 months.⁷ In the study of Lamarca et al., survival was found to be approximately 15 months with gemcitabine and cisplatin chemotherapy treatment in cases with intrahepatic cholangiocarcinoma.⁸ In the study performed by Kim et al., they found a median overall survival time of 38.5 months with percutaneous radiofrequency ablation therapy in patients with unresectable primary intrahepatic cholangiocarcinoma.⁷ In the study of Fu et al., the median recurrence-free survival and overall survival were 17 months and 33 months after treatment with radiofrequency ablation in patients with unresectable intrahepatic cholangiocarcinoma. They also determined that 1-year and 3-year survival rates were 84.6% and 43.3%.⁹

In the treatment of our patient, we used radiofrequency ablation therapy. Radiofrequency ablation can be used instead of chemotherapy or it can be used in combination with chemotherapy. In this case, the dose of chemotherapy can be reduced. This also reduces the unwanted side effects of chemotherapy. It can also increase the effectiveness of chemotherapy. In May 2022, radiofrequency ablation was performed by the interventional radiology department of our university. The patient who did not develop any complications after the procedure, is still being followed up by Trakya University, as an out patient.

Primary chemotherapy may be used in cases of inoperable colangiocarcinoma. However, it should be kept in mind that radiofrequency ablation treatment can also be used in appropriate patients. More case series and retrospective studies are needed to determine the treatment preference more clearly.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: İbrahim Ethem Çakçak; **Design:** İbrahim Ethem Çakçak, Kübra Nur Kabay; **Control/Supervision:** İbrahim Ethem Çakçak, Canan Büşra Akbaş; **Data Collection and/or Processing:** Canan Büşra Akbaş, Kübra Nur Kabay; **Analysis and/or Interpretation:** İbrahim Ethem Çakçak, Kübra Nur Kabay; **Literature Review:** Kübra Nur Kabay; **Writing the Article:** Kübra Nur Kabay; **Critical Review:** İbrahim Ethem Çakçak.

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