

Case Report on Perihilar Cholangiocarcinoma

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ABSTRACT

A 61 years old female patient was a known case of hilar cholangiocarcinoma type 3A status post percutaneous transhepatic drainage + metal stenting done on 2025 on cyclical antibiotics. She is planned for plan for right hepatectomy + CBD excision + Hep J. Now been admitted in hospital. Past history of evaluated for jaundice + yellowish color of urine in march 2025. History of CAM intake for skin hyperpigmentation. History of weight loss +. She was diagnosed with hilar cholangiocarcinoma type 3A. Past surgery status post percutaneous transhepatic biliary drainage + metal stent in february 2025. Procedure done right hepatectomy + CBD excision + Hep J done on May 2025. She was started with prophylactic antibiotics and analgesic. She was hemodynamically stable, afebrile surgical wound healing with primary intentions.

Keywords: Hilar cholangiocarcinoma, hepatectomy, antibiotics, discharge

1. INTRODUCTION

Perihilar cholangiocarcinoma, or Klatskin tumor, arises at the junction of the right and left hepatic bile ducts and is known for its indolent growth but aggressive behaviour. It usually occurs between the fifth to seventh decades of life and shows a mild male predominance. Primary risk factors are primary sclerosing cholangitis (PSC), choledochal cysts, hepatolithiasis, and chronic biliary inflammation. Clinically, the patient can present with progressive jaundice, pale stools, dark coloured urine, weight loss, and right upper quadrant pain. Laboratory results are characteristically cholestatic elevation of liver enzymes with raised bilirubin and alkaline phosphatase. The diagnosis is dependent on high-resolution imaging modalities like MRCP, CT scan, or endoscopic methods like ERCP, supplemented by biopsy or cytology. Perihilar tumors are staged using the Bismuth-Corlette classification, which determines treatment options. Curative surgery resection, usually involving hepatic lobectomy and biliary reconstruction, is still the treatment of choice, but only a small proportion of patients are suitable because of late presentation. Where there is unrespectability, palliative biliary drainage and chemotherapy are

offered. Although diagnosis and treatment have improved, prognosis continues to be poor, and there is a call for early diagnosis and better therapy.

CASE REPORT:

A 61 years old female admitted to hospital with known case of hilar cholangiocarcinoma type 3A status post percutaneous transhepatic biliary drainage + metal stenting done on 2025 of April. She is planned for right hepatectomy + CBD excision + Hep J. now admit for further management. Evaluated for jaundice + yellowish colour of urine in march 2025. History of CAM intake for skin hyperpigmentation and history of weight loss. From clinical examination blood pressure

140/60mmhg, heart rate- 86 bpm, respiratory rate- 18 breaths/minute, saturation- 99% on room air, cardiovascular system- S1S2(+), Respiratory system- bilateral air entry (+), gastrointestinal system- soft, non-tender, central nervous system- no focal neurological deficit. The diagnosis is Hilar cholangiocarcinoma type 3A. procedure done is right hepatectomy + CBD excision + Hep J done on may 2025. Procedure was done uneventfully. Post operative management she was started with prophylactic antibiotics and analgesics. on post operative day 1 she develops tachycardia, for which cultures sent for analysis. On POD 2 she complained with cough which was managed appropriately. She was shifted to ward. On POD 3 she was complained with pain which was appropriately managed with appropriate analgesics. On POD 4 infectious disease opinion was recommended in view of gram negative bacterial and orders were followed. Due to drop of haemoglobin two unit of packed red blood cell was transfused. Hepatic Doppler was done which was showed trace fluid collection see along anterior perihepatic space (~10 cc). Right pleural effusion (~30 cc). with sonographic air bronchogram in right CP recess. On POD 5 she complained one episode of vomiting and which was managed appropriately. Drain fluid triglyceride levels were sent for analysis and showed 39 mg/dl. A repeat test day 6 showed 59 mg/dl. Her drain output reduced in volume and drain was removed on POD 8. On POD 9 hepatic Doppler was done which showed right minimal (volume ~ 20-25 cc) pleural effusion. On POD 11 Computed tomography abdomen done which showed right subphrenic fluid collection as described. On POD 12 her total leukocyte level was elevated for which infectious disease opinion was obtained and the recommended management was followed. She becomes clinically and symptomatically better, hemodynamically stable, tolerating oral diet and wound healing well. She was discharged with following advice of take high protein diet. Fat free diet. And avoid strenuous activities for 3 months and avoid weight lifting

2. LAB PARAMETERS:

The patient's CBC reveals hemoglobin of 11.4 g/dl, the total leukocyte count is 8010 cells/mm³, and the platelet count is 324,000/mm³, all in normal limits. Prothrombin time is 11.9 seconds with INR of 1.00, which indicates normal coagulation status. Renal function tests are normal with urea of 19 mg/dl and creatinine of 0.54 mg/dl. Serum electrolytes show sodium at 139 mmol/l and potassium at 4.0 mmol/l, both normal. Liver function tests show an elevated total bilirubin at 2.62 mg/dl. AST at 56 U/L and ALT at 49 U/L are mildly elevated, whereas ALP at 298 U/L and GGT at 156 U/L are hugely elevated, indicating cholestatic liver dysfunction. Albumin is 4.1 g/dl, globulin is 3.5 g/dl, and total protein is 7.6 g/dl, which is within normal limits, representing maintained synthetic liver function.

Discharge drugs:

The patient was at discharge put on a supportive and antimicrobial regimen. Folic acid 5 mg OD after food was administered to provide nutritional support. Paracetamol 650 mg TDS after food was prescribed for pain relief and ant pyrexia. Pantoprazole 40 mg OD after food was given to protect the stomach from gastric irritation. Also, the patient was continued on tigecycline 100 mg intravenously BD following food as a component of regular antibiotic therapy.

3. DISCUSSION:

This case shows the difficult perioperative and postoperative management of a 61-year-old woman with Type 3A hilar cholangiocarcinoma. She was initially treated with percutaneous transhepatic biliary drainage and stenting due to obstructive jaundice and subsequently underwent definitive surgical resection. Right hepatectomy with excision of common bile duct and hepaticojejunostomy was successfully done. Postoperatively, the patient had universal complications including tachycardia, pain, and pleural effusion, which were managed accordingly with supportive therapy, antibiotics, and painkillers. Minor collections of fluid and a transient decrease in haemoglobin required imaging and blood transfusion. Infectious disease opinions were obtained for increased leukocyte levels and gram-negative growth, for which therapy was appropriately modified. Slow clinical improvement, decreased drain output, and stable vitals permitted discharge with dietary and activity-related instructions. This case highlights the value of multidisciplinary care and close postoperative monitoring in the treatment of advanced cholangiocarcinoma.

4. CONCLUSION:

This case presentation demonstrates the total surgical and medical care of a 61-year-old female with Type 3A hilar cholangiocarcinoma. After preliminary biliary decompression through percutaneous transhepatic drainage and stenting, she was treated with definitive surgery in the form of right hepatectomy, excision of the common bile duct, and

hepaticojejunostomy. Postoperative adverse effects like tachycardia, pleural effusion, subphrenic fluid collection, and gram-negative infection were successfully controlled with multidisciplinary management, timely administration of antibiotics, transfusions, and close observation. Her increasing clinical improvement, stable hemodynamic, and excellent wound healing facilitated discharge on supportive measures and dietary recommendations. This case underscores the significance of early diagnosis, prompt surgery, and close postoperative monitoring in enhancing outcomes in patients with advanced hilar cholangiocarcinoma

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