dominal pain, itching, and body weight loss (up to 8 kg for half a year). She was admitted due to obstructive jaundice with unknown cause on 16 July 1997.

Physical examination on admission showed icteric sclera. No jugular vein engorgement nor lymphadenopathy were seen. The bilateral lungs were symmetrically expanded and clear on ausculation. No spider angioma was noted. The abdomen was soft and not tender. No superficial vein engorgement was noted. The liver and spleen were not palpable. The extremities were freely movable. No pitting edema or palmar erythema was found. The neurological examination was normal.

On admission, laboratory examination revealed a nearly normal complete blood count (Table 1). Biochemistry screening showed abnormal increases in serum levels of direct bilirubin (19.1 mg/dL) and total bilirubin (30.1 mg/dL) (Table 2). The serum levels of tumor markers were normal except for a slight elevation in Ca19-9 (399 μ /mL) (Table 3). In addition, she was a hepatitis B carrier with positive HBs antigen in the serum. Endoscopic retrograde cholangiopancreatogram was performed and revealed a space-occupying lesion at the hilar region of the liver with dilatation of right intrahepatic duct. Abdominal sonography and abdominal CT scan showed dilatation of the intrahepatic ducts, and a mass lesion at the junction of the common bile duct and the right intrahepatic duct was highly suspected. Under clinical impression of cholangiocarcinoma, biliary stent and PTCD via bilateral intrahepatic ducts were performed to relieve obstructive jaundice. Then the serum level of total bilirubin decreased gradually. Unfortunately, fever developed from 28 August. Pyuria was found, but the result of urine culture was negative. Intravenous antibiotics were given. The fever gradually subsided. Two biliary endoprotheses were inserted on 30 August, and she was discharged on 12 September 1997. Then radiotherapy with a total radiant dose of 5000 cGY was administered, and she was regularly followed up at the oncology OPD.

In the following abdominal sonography on 1 May 1998, two hepatic tumors and dilatation of the common bile duct and intrahepatic duct were noted. She began

Table 1. Blood Count.

	First admission 17 July 1997	Final admission 6 May 1998	22 June 1998
WBC (no./μL)	5880	10310	12940
RBC (10^6/μL)	3.66	3.51	3.25
HGB(g/dL)	12	11	9.6
Hct (%)	37.6	33	29.5
MCV (fL)	102.6	94	90.1
MCH (pg)	32.8	31.3	29.5
MCHC (g/dL)	32	33.3	32.8
RDW (%)	15.7	14.1	16.9
Plt (10^3/μL)	246	220	123
Netrophil (%)	69.3	86.7	96.7
Lymphocyte (%)	18.1	4.7	0.5
Monocyte (%)	5.0	7.2	1.7
Eosinophil (%)	4.9	0.2	0.5
Basophil (%)	0.5	0.3	0.3

Table 2. Biochemical Data

	First admission 17 July 1997	Final admission 6 May 1998	20 June 1998
Total protein (g/dL)	5.6	6.9	6.2
Albumin (g/dL)	3.4	3.9	2.6
BUN (mg/dL)	10.7	13.1	16
Creatinine (mg/dL)	0.6	0.6	0.6
Uric acid (mg/dL)	2.9	4.0	2.0
Cholesterol (mg/dL)	215	162	99
Triglyceride (mg/dL)	348	57	35
GOT (IU/L)	55	22	40
GPT (IU/L)	54	22	23
Alkaline-P (U/L)	252	211	525
ZTT (mg/dL)	13.4	7.5	12.4
γGT (mg/dL)	175	280	346
D-bilirubin (mg/dL)	19.1	0.7	2.1
T-bilirubin (mg/dL)	30.1	2.0	3.9
Glucose (mg/dL)	125	133	127
Na^+ (mEq/L)	143	142	131
K+ (mEq/L)	3.7	3.4	3.0
Ca^{2+} (mEq/L)	10	10.2	10.3
Cl^- (mEq/L)	108	95	84

Table 3. Tumor Markers.

	18 July 1997	10 April 1998	Normal range
AFP (ng/mL)	0.85		< 15
CEA (ng/mL)	2.59	1.63	< 4.6
CA19.9 (μ/mL)	399	14962	< 37
CA125 (μ/mL)	20.61		< 35
CA153 (μ/mL)	20.3		< 28

Wound culture on 28 August 1997: Coagulase (-) staphylococcus. Blood culture on 22 June 1998: Enterobacter cloacae.