

CASE 2012-4

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CLINICAL HISTORY:

This 60 yo M presented with jaundice. The diagnosis of cholangiocarcinoma causing biliary obstruction was made by liver FNA. Based on CT scan at presentation, the tumor was known to be metastatic to liver, lungs and iliac/sacrum. His past medical history included hyperlipidemia, hypertension, and gastroesophageal reflux. He was admitted for jaundice and renal failure. He had endoscopic retrograde cholangiopancreatography (ERCP) and a stent was placed, but it was not effective. Shortly thereafter, he developed acute renal failure and was placed in hospice. Two days before death he was confused. He died following two grand mal seizures. There was no other neurological history and no neuroimaging.

General Autopsy: Intrahepatic cholangiocarcinoma, metastatic to the lungs. A common bile duct metal stent was intact and patent; there was splenic and pulmonary congestion, pancreatitis, jaundice, acute and chronic peritonitis, atherosclerosis and an incidental colonic ganglioneuroma

Neuropathology: The scalp, skull, dura and brain were bile-stained. The fresh brain weighed 1400 g; the fixed brain weighed 1520 g. There was severe cerebral atherosclerosis. The leptomeninges were clear; there was no focal softening; there was a small fresh subarachnoid hemorrhage over the right parieto-temporal region. The cortical ribbon was grossly intact. There were scattered prominent vessels or petechiae, some with tan discoloration, in the cerebral white matter. Deep gray nuclei and hippocampi were unremarkable. The basis pontis and bilateral middle cerebellar peduncles had multiple round hemorrhagic areas measuring up to 0.3 cm in maximum dimension in a mostly symmetric distribution.

# Luxol Fast Blue

# $\beta$ -APP IHC

## MATERIAL SUBMITTED:

Images (Gross, LFB, B-APP), 1 H&E and 1 unstained slide of basis pontis

## POINTS FOR DISCUSSION:

- 1 Diagnosis
- 2 Pathogenesis