



CASE STUDY: BELLA MCMAHON

COMPLEX BILIARY, CARDIAC, AND
GASTROINTESTINAL DISEASE IN A
CANINE PATIENT

PATIENT BACKGROUND

Patient: Bella McMahon

Species: Canine

Hospitalization Dates: March 11–18, 2025

Presenting Complaint: Acute vomiting,
lethargy

HISTORY & INITIAL PRESENTATION

Bella presented on March 11, 2025 for acute onset of vomiting and lethargy. Her owners reported a history of biliary concerns. She was admitted directly under the Critical Care (CC) Service, who coordinated all diagnostics and stabilization during her hospitalization. Abdominal ultrasound revealed gallbladder obstruction with cholelithiasis (gallstones) and inspissated bile, along with pancreatic enlargement and hyperechoic peri-pancreatic fat, consistent with concurrent pancreatitis.

BLOODWORK AT ADMISSION SHOWED:

- Mild ALT elevation (stable to slightly worse over hospitalization)
- Moderate ALP and GGT elevation (GGT not rechecked)
- Mild to moderate hyperbilirubinemia (resolved during hospitalization)
- Leukocytosis (neutrophilia and mild monocytosis, not rechecked)
- Mild hypokalemia (resolved)
- Moderate hypoalbuminemia (progressive, later resolved)

SURGICAL INTERVENTION

Following stabilization, the CC Service recommended surgical intervention. On March 11, Dr. Rudd performed a cholecystectomy to address the gallbladder disease.

- Intraoperative findings: Persistent dilation of the common bile duct, abnormal thickening at the duodenal papilla, and inability to cannulate the duct, raising concern for possible ampullary or periampullary neoplasia (none confirmed on biopsy).
- Additional procedures: Liver and duodenal biopsies.
 - Duodenal histopathology: mild lymphoplasmacytic and eosinophilic enteritis.
 - Liver biopsy: changes consistent with chronic hepatobiliary disease, no neoplasia detected.

Following surgery, Bella was transferred back to the CC Service for continued postoperative management.



FLORIDA
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CENTER

EMERGENCY + SPECIALTY

POSTOP COMPLICATIONS

Cardiac

- Developed ventricular arrhythmias, including intermittent ventricular tachycardia.
- Initially controlled with IV lidocaine, transitioned to oral sotalol for maintenance.
- Echocardiography revealed decreased myocardial contractility without chamber thinning or significant structural disease, improved with pimobendan.

Neurologic

- Persistent postoperative depression (altered mentation).
- Differential diagnoses included hepatic encephalopathy, hypothyroid-related dysregulation, primary neurologic disease, or neoplasia.
- Improvement noted after flumazenil administration.
- Hypothyroidism supplementation restarted.
- On March 14, Bella experienced a generalized seizure, likely multifactorial, with hepatic encephalopathy high on the list.

Gastrointestinal

- Moderate ascites developed, suspected secondary to hypoalbuminemia and third-spacing.
- Diarrhea occurred but improved with supportive care.

Metabolic

- Progressive hypoalbuminemia worsened Bella's ascites and mental status; albumin loss attributed to hepatic inflammation and surgical stress.

MAJOR TURNING POINT

On March 16, Bella received a fresh frozen plasma (FFP) transfusion, which provided a significant clinical turnaround. Albumin levels improved, ascites began resolving, and energy level markedly increased.

DISCHARGE & OUTCOME

By March 17, Bella was brighter, eating more consistently, and showing gradual improvement in hepatic parameters. She was discharged on March 18, 2025, with:

- Ongoing sotalol and pimobendan for cardiac management.
- Hepatic support medications and diet.
- Plans for close rechecks to monitor liver function, cardiac rhythm, and possible biliary tract changes.

Since discharge, Bella has remained under Dr. Smith's care for long-term follow-up, nutrition planning, and medication management. She continues to improve at each recheck.

FINAL DIAGNOSIS

- Gallbladder disease – cholelithiasis, inspissated bile, gallbladder debris; status-post cholecystectomy.
- Persistent common bile duct dilation with abnormal papilla—etiology uncertain (possible neoplasia vs. inflammatory stricture).
- Concurrent pancreatitis.
- Chronic enteropathy – mild lymphoplasmacytic and eosinophilic enteritis.
- Ventricular arrhythmias with myocardial depression (responsive to antiarrhythmics and pimobendan).
- Hypoalbuminemia with secondary ascites (resolved).
- Hepatic encephalopathy with seizure activity (improved).
- Postoperative ileus and diarrhea (resolved).
- Hypokalemia (resolved).



DISCUSSION

Bella's case illustrates the challenges of managing multisystem disease in small animal medicine, from biliary obstruction and hepatopathy to cardiac arrhythmias and neurologic complications. The collaboration between the Critical Care Service, surgical team, and primary care veterinarian was essential to her survival and ongoing recovery.

BELLA'S MEDICAL TEAM



DR. THERESA SMITH



DR. RAY RUDD



For more information on our services, please contact FVRC at (239) 992-8878, visit our website at flvrc.com, or reach out to our Referral Relationship Manager: Danielle Reichling | Danielle.somerville@ethosvet.com | (330) 936-5611