

## CLINICAL PARAMETERS IN DOGS WITH SONOGRAPHICALLY DIAGNOSED SURGICAL BILIARY DISEASE

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The purpose of this study was to quantify the most reliable clinical parameters that are consistent with surgical biliary disease in the dog. Retrospective analysis was performed on clinical parameters in 42 dogs that were found to have signs consistent with hepatobiliary disease and a sonographic diagnosis of surgical biliary disease. Entry criteria included 1) surgical resolution of clinical signs via cholecystectomy and/or biliary diversion, 2) euthanasia owing to lack of medical treatment response and owner's decline for surgical management, or 3) natural death shortly after diagnosis of surgical biliary disease. Twenty-nine dogs were treated surgically. Thirteen dogs were managed medically. Twelve/13 medically treated patients were euthanized or died without surgery within 4 months of clinical presentation or sonographic diagnosis. One patient survived 11 months with medical therapy alone. The following clinical parameters were evaluated: vomiting 24/42(57%), anorexia 22/42(52%), lethargy 14/42(33%), visible icterus 11/42 (26%), diarrhea 4/42 (9%), & fever 1/42(2%). Five/42 patients had no overt clinical signs but were sonographically investigated for hepatic enzyme elevations. These 5 patients did have sonographic/surgical diagnoses of gall bladder mucocele or biliary calculi with evidence of complicating factors that warranted surgical treatment. Complete blood counts revealed: leukocytosis 18/42 & anaemia 10/42. Blood chemistry analyses revealed: Alanine transferase (ALT) normal 8/42, elevated < 500 U/L 18/42, elevated > 500 U/L 16/42; Alkaline phosphatase (SAP) normal 4/42, elevated < 500 U/L 10/42, elevated > 500 U/L 28/42; Bilirubinemia 22/42. One patient that underwent cholecystectomy, and diagnosed with moderate chronic fibrosing lymphoplasmacytic cholecystitis, had normal blood analysis and presented only for progressive anorexia. Causes of biliary obstruction included gall bladder mucocele and/or cholecystitis/cholangiohepatitis (37/42), biliary calculi with partial or complete obstruction (3/42), and hepatic masses obstructing biliary flow/mucocele (2/42). Eleven patients had evidence of biliary rupture, localized peritonitis and adhesions, or full peritonitis at surgery. Only 42% of patients in our group had leukocytosis even though histopathological analyses revealed significant levels of inflammation in most samples. Moreover, even though 52 % of patients had serum bilirubin elevations only 26% revealed clinical icterus. Abdominal sonography was the key diagnostic tool utilized in all 42 cases to select surgery intervention as the recommended therapy.