Research Article

Hematological and Biochemical Profiles of Indigenous Cats in Bangladesh Suspected of Feline Infectious Peritonitis

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Abstract | Feline coronavirus(FCoV) causes feline infectious peritonitis (FIP) disease in cats. This study aimed to investigate the hematological and biochemical profiles of indigenous cats infected with FIP in Bangladesh. A total of five indigenous cats with suspected FIP were examined at the Healers Pet Animal Clinic, Nakhalpara, Dhaka. Hematological and biochemical parameters were analyzed using the automated blood and biochemical analyzer at the specialized veterinary hospital and diagnostic center, Uttara, Dhaka. Results showed that five cats tested positive in Rivalta's test. Mean hematological values included: Hb (10.58±2.12 gm/dl), ESR (28.80±1.30 mm/hour), TWBC (12572±7382.3/cmm), TRBC (7.54±1.19 × 10^6/µl), and TPC (138600±58611.43/cm). Biochemical results revealed elevated serum total protein (8.34±1.388 gm/dl), globulin (5.09±1.38 gm/dl), urea (52.22±10.61 mg/dl), and blood urea nitrogen (25.81±4.33 mg/dl). The albumin/globulin ratio (0.643±0.13) was lower than the standard reference range. Enzyme levels included SGPT (22.32±16.91 u/l), SGOT (10.48±4.48 u/l), and ALP (48.27±33.11 u/l). FIP-suspected native cats in Bangladesh show hematological and biochemical alterations similar to those observed in purebred cats, particularly a reduced albumin/globulin ratio. The albumin/globulin ratio may serve as a reliable diagnostic biomarker for FIP in indigenous cats of Bangladesh. This study supports the development of localized diagnostic protocols for more effective management of FIP in resource-limited settings.

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Introduction

Feline infectious peritonitis is a disease with a high mortality rate that occurs in domestic and wild members of the feline family worldwide. The pathology of infectious peritonitis in cats is still one of the least researched viral diseases. Thus, there was no specific diagnostic test, no effective vaccine

for prevention, and no clear understanding of the mechanism of interaction of the virus with the body of a sensitive animal during the occurrence of the disease (Pedersen *et al*., 2004). Feline coronavirus (FCoV) causes gastrointestinal and respiratory diseases in cats and is composed of two biotypes feline infectious peritonitis virus (FIPV) which causes lethal conditions and feline enteric virus (FEV) associated with asymptomatic persistent enteric infections (Addie *et al*., 2009). The mutation of the viral genome leads to a change in the tropism of the host from enterocyte to macrophage which provokes a systemic infection known as FIP (André *et al*., 2019). FIPV infection is more severe through induced inflammation, fibrinous to granulomatous serositis, and immune-mediated vasculitis (Kipar *et al*., 2005) showing effusive and non-effusive form.

A recent study reported that cats with effusive FIP showed shorter clinical onset and survival times than cats with non-effusive FIP (Pedersen, 2009). In addition, FEV infection is characterized by subclinical or mild gastroenteritis and is highly prevalent in domestic cats worldwide. It is known that the initial infection with FIV occurs by the fecal-oral route. The diagnosis of feline infectious peritonitis is quite complicated in cats due to lacking specific clinical symptoms. The expert veterinarian notices more specific symptoms of feline infectious peritonitis during a physical examination. FIP-infected cats commonly show dyspnea, the distension of the abdominal cavity due to the accumulation of exudate, icterus of visible mucous membranes and skin, hyperbilirubinemia, visible masses on the kidneys and/or mesenteric lymph nodes, uveitis, and neurological symptoms associated with involvement of the brain or spinal cord. Rapid antigen/antibody kit tests (FCoV Ag/Ab Test Kit) are usually used to detect feline coronavirus in suspected animals and are limited in recognizing the coronavirus infection.

So, the clinical history, clinical signs, molecular detection, and ultrasound examination are necessary for the confirmatory diagnosis of feline infectious peritonitis in cats. The cost and availability of molecular detection and ultrasound examination are expensive in developing countries like Bangladesh. Therefore, the combination of rapid kit tests, and hematological and biochemical properties with clinical history and symptoms might be the most suitable option for confirming feline infectious peritonitis in the cat. A recent report showed that total leucocyte, granulocyte, and monocyte were decreased in cats affected with FIP (Goto *et al*., 2025). Anemia, lymphopenia, thrombocytopenia, hypoalbuminemia, hyperglobulinemia, and lower albumin-to-globulin ratio were the striking properties of blood profiles of cats affected with feline infectious peritonitis (Moyadee *et al*., 2024; Norris *et al*., 2005; Thayer *et al*., 2022). Previous research showed that alanine aminotransferase, lactate dehydrogenase, alkaline phosphatase, total bilirubin, total protein, and globulin concentrations were increased, where albumin and globulin (A/G) ratios found to be significantly lower in cats with FIP (Moyadee *et al*., 2024). Several epidemiologic studies have shown that breed, age, sex, cattery size, season, stress, coronavirus antibody titer, and environmental factors act as risk factors for the development of feline infectious peritonitis disease in cats (Pesteanu-Somogyi *et al*., 2006; Rohrbach *et al*., 2001). Several studies have shown that purebred cats were more susceptible to feline infectious peritonitis, and diagnostic protocols and standard values were developed based on the research of hematological and biochemical tests of purebred cats in different developed countries (Pesteanu-Somogyi *et al*., 2006). Thus, understanding the hematological and biochemical parameters of a FIP provides important indices to develop diagnostic techniques and ultimately control the infection in the indigenous cat.

To the best of our knowledge, there are no reports of hematological and biochemical profiles of indigenous cats in Bangladesh with feline infectious peritonitis. Therefore, we hypothesized that the FIP infection in indigenous cat may result in disturbances in their hematological and biochemical profiles, which exacerbate the disease. Thus, we examine the hematological and biochemical profiles of indigenous cats with feline infectious peritonitis treated at Healers Pet Animals Clinic, Dhaka.

Material and Methods

Animals

A total of 5 (five) indigenous cats with effusion were selected for Rivalta's test, hematological and biochemical profiles examination. All cats were under treatment with the suspicion of feline infectious peritonitis as the confirmatory diagnosis was difficult due to the limitation of the diagnostic facilities at the Healer's Pet Animal Clinic at Locus Moor of

Nakhalpara, Dhaka. Finally, the feline infectious peritonitis suspected cats were referred to the veterinary specialized hospital and Diagnostic Center, Dhaka for laboratory diagnosis of suspected diseases.

Physical and clinical symptoms examination

Indigenous cats were repeatedly visited at the Healer's Pet Animal Clinic with similar signs and symptoms without responding to traditional treatments. The physical examination was carried out using visual inspection, palpation, percussion, and auscultation methods. Moreover, clinical symptoms were recorded based on the recently published research findings (Solikhah *et al*., 2024).

Rivalta's test

The Rivalta Test was performed to differentiate transudate and exudate in the effusion fluid of suspected cats of FIP from the effusion fluid of other diseases at Veterinary specialized hospitals and the Diagnostic Center, Dhaka. About 0.5 ml effusion fluid was collected carefully from the peritoneal cavity using a 25 mm (25G x1") needle by the peritoneocentesis method. A transparent 10 ml test tube was filled with 8 ml of distilled water. The test tube was placed on a rack sitting on a plane surface and one drop of acetic acid was added and mixed thoroughly. A total of 0.5 ml of ascites was carefully placed into the test tube containing 98% glacial acetic acid and 8 ml of distilled water.

Hematological examination

The consent of the pet owners has been signed for the examination of hematological profiles of cats that were positive for Rivalta's Test. A total of 8 ml of blood was collected using a 0.64 mm (23G) needle from the femoral vein of cats that were positive with the Rivalta test. About 4 ml of the blood was kept in the test tube containing anticoagulant (EDTA) for hematology, and the rest of the blood was kept within the syringe without anticoagulant to collect serum for biochemical examination. The hematological examinations were performed using an automated hematology analyzer (CELL-DYN 3700; Abbott Laboratories; USA)

Biochemical examination

The consent of the pet owners has been signed for the examination of biochemical profiles of cats that were positive for Rivalta's Test. A total of 5 ml of blood was collected using a 0.64 mm (23G) needle from the femoral vein of cats that were positive with the Rivalta test. The blood was kept within the syringe without anticoagulant in an inverted position at room temperature for serum collection to perform a biochemical examination. The biochemical examinations were performed using an automated chemical analyzer (ILab 650; Werfen; India). The data was automatically recorded on the computer and visualized through the printed version of laboratory reports.

Statistical analysis

The hematological and biochemical parameters of cats infected with feline infectious peritonitis were recorded. These data are compared with the standard reference data of an automated hematology and biochemical analyzer. Finally, all data were analyzed using Microsoft excel and expressed in mean±standard deviation.

Results and Discussion

Physical and clinical findings

We found that the chief veterinary consultant of the Healer's Pet Clinic recorded predominant clinical symptoms of effusive feline infectious peritonitis. The recorded predominant clinical symptoms included abdominal distension, depression, dehydration, uveitis, anorexia, dyspnea, jaundice, diarrhea, and vomiting. Abdominal distension, uveitis, and dyspnea were very common clinical symptoms indigenous cats of Bangladesh suspected with feline infectious peritonitis (Figure 1A).

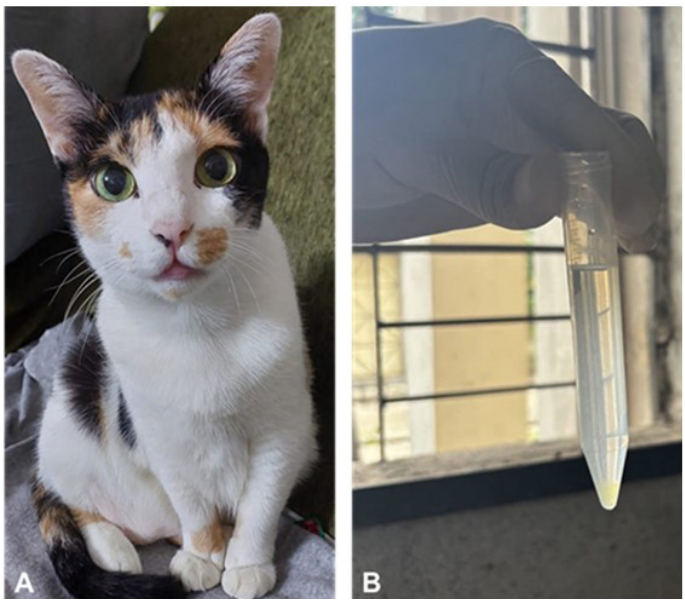

Figure 1: *A: Photograph showing clinical signs and symptoms of the indigenous cat of Bangladesh suffering from feline infectious peritonitis. B: The Rivalta's Positive test shows the settling of peritoneal fluid at the bottom of the tube.*

Rivalta's test findings

We found that the effusion fluid from suspected feline infectious peritonitis cases was viscous, yellowish in color, cloudy, and formed lumps in the test tube due to the presence of high protein content. The drops of effusion fluid floated down to the bottom of the tube indicating a positive test for feline infectious peritonitis of indigenous cats (Figure 1B). This test was repeated for each cat suspected of feline infectious peritonitis. The findings of Rivalta's test were almost similar to those of the published research articles (Fischer *et al*., 2012).

Hematological findings

We analyzed the data of blood parameters collected from the feline infectious peritonitis-affected cat by an auto-hematoanalyzer at Specialized Veterinary Hospital and Diagnostic Centre, Dhaka. We found that the hemoglobin (Hb) concentration, erythrocyte sedimentation rate (ESR), total white blood cell (TWBC) count, total red blood cell (TRBC) count, and total platelet cell (TPC) count were automatically analyzed, recorded, and composed (Table 1). The recorded data showed that the mean Hb, ESR, TWBC, TRBC, and TPC were 10.58±2.12 gm/dl; 28.80±1.30 mm/hour; 12572±7382.3/cmm; 7.54±1.19x10^6/µl, 138600±58611.43/cmm, respectively. These blood profiles indicated that the erythrocyte sedimentation rate was slightly increased to 28.80±1.30 mm/h compared to 7-27 mm/h (reference value). In addition to these, the mean values of Hb, TWBC, TRBC, and TPC were within the range of reference values automated in the hematoanalyzer (Table 1). We found in the profiles of differential leukocyte count that the percentage of neutrophils, eosinophils, lymphocytes, monocytes, and basophils was 54.80±24.10; 36.20±21.89; 4.4±2.15; 4.6±3.44 and 0.0, respectively. The percentage of leukocyte count in blood was within the range of standard reference values. The total red blood cell count showed that packed cell volume (PCV), mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), mean corpuscular hemoglobin concentration (MCHC), the percentage of red cell distribution width-coefficient of variation (RDW-CV) were 32.56±6.06, 43.08±5.54, 13.98±1.54, 32.64±1.63, and 17.14±1.64, respectively. We found that most of the red blood cell count parameters were in the range of standard

Table 1: *Hematological profiles of indigenous cats of Bangladesh affected with FIP.*

Parameters	Ref. Value	Cat-1	Cat-2	Cat-3	Cat-4	Cat-5	Mean	Std.dev	R-value of FIP
Hb (g/dl)	8.9-15.6	12.9	7.6	11.2	11.9	9.3	10.58	2.122969618	7.6-12.9
ESR (mm/1st hour)	7-27 mm/hr	30	28	27	30	29	28.8	1.303840481	27-30
Total WBC count (/cmm)	5100-17000	19400	2820	16300	17740	6600	12572	7382.311291	2820-19400
Differential WBC count									
Neutrophil (%)	27-82	82	32	76	30	54	54.8	24.10808993	30-82
Lymphocyte (%)	9-56 %	11	58	10	60	42	36.2	21.89429149	10.0-60
Monocyte (%)	0-8	2	7	3	7	3	4.4	2.154065923	2.0-7.0
Eosinophil (%)	0-6	5	3	11	3	1	4.6	3.440930107	1.0-11
Basophil (%)	0-1	0	0	0	0	0	0	0	0
Total RBC count (10^6/µL)	6.5-10.5	8.94	6	6.66	8.95	7.32	7.574	1.194715029	6.0-8.94
HCT/PCV (%)	31-48	40.2	24.8	34.9	36.8	26.1	32.56	6.062540722	24.8-40.2
MCV (fl)	39-55	45	41.3	52.4	41.1	35.6	43.08	5.542346074	35.6-45
MCH (pg)	13-17	14.4	12.7	16.8	13.3	12.7	13.98	1.540649214	12.7-16.8
MCHC g/dl	30-36	32.1	30.8	32.1	32.5	35.7	32.64	1.634135857	30.8-35.7
RDW-CV (%)	10-16 %	16.3	15.3	16.4	17.5	20.2	17.14	1.681190055	15.3-20.2
Total Platelet Count (cmm)	180000-624000	176000	4700 0	167000	114000	189000	138600	58611.43233	47000-189000
MPV (fl)	12-24.3	10	4.8	10.8	6.9	6.8	7.86	2.481531785	4.8-10.8
PDW (%)	10-18%	11.8	18.2	14.5	17.8	18	16.06	2.826305008	14.5-18.2
PCT (%)	0.1-0.2	0.13	0.023	0.18	0.079	0.129	0.1082	0.059528985	0.02-0.18

Table 2: *Biochemical profiles of indigenous cats of Bangladesh affected with FIP.*

Parameters	Ref. V	Cat-1	Cat-2	Cat-3	Cat-4	Cat-5	Mean	Std.Dev	Range-value of FIP
Total Protein (g/dl)	6-7.9	8.1	7	8.6	10.58	7.46	8.348	1.3885676 1	7.0-10.58
Albumin (g/dl)	2.8-3.9	2.95	2.6	3.75	3.23	3.24	3.154	0.4233556	2.6-3.75
Globulin (g/dl)	2.3-5.3	4.4	4	5.5	7.35	4.22	5.094	1.3871481	4.0-7.35
A/G ratio	0.8-2.0	0.59	0.75	0.62	0.44	0.77	0.634	0.1339029	0.44-0.77
Creatinine(mg/dl)	0.5-1.8	1.5	2.56	1.35	3.85	2.3	2.312	1.0014839	1.35-3.85
Urea (mg/dl)	40-72	59.8	65	45	38.9	52.4	52.22	10.610937	45-65
BUN (mg/dl)	19-34	27.9	29.78	22.3	29	20.1	25.816	4.3367361	20.1-29.78
Total Bilirubin (mg/dl)	0.1-0.3	0.5	0.98	0.91	0.78	0.77	0.788	0.1837661	0.5-0.98
SGPT (U/L)	25-97	52	13	20.4	14.41	11.83	22.328	16.911971	11.83-52
AST/SGOT(U/L)	17-48	11.2	10.22	15.3	12.49	3.22	10.486	4.4879260	3.22-15.3
ALP (U/L)	11-49	72	84.22	55	3.19	26.95	48.272	33.119318	3.19-84.22

reference values except the percentage of red cell distribution width-coefficient of variation was increased in the blood of feline infectious peritonitis-affected cats. By contrast, the total platelet count showed the mean platelet volume, the percentage of platelet distribution width, and plateletcrit were 7.86±2.48, 16.06±2.82, and 0.10±0.05, respectively (Table 1). In total platelet count, we found that the percentage of plateletcrti was decreased in the feline infectious peritonitis-affected cat compared to the range of standard reference values for normal healthy cats.

Biochemical findings

The data of biochemical parameters of blood serum collected from the FIP-affected cats were analyzed by biochemical analyzer at the Specialized Veterinary Hospital and Diagnostic Centre, Dhaka. We found that the mean total protein and total bilirubin in blood serum were 8.34±1.388 gm/dl and 0.78±0.18 mg/dl, respectively (Table 2). These findings showed that total protein was slightly increased in the blood serum of FIP-affected cats compared to the range of standard reference values of the healthy cat. Moreover, the concentration of albumin, globulin, creatinine, urea, and blood urea nitrogen in blood serum was 3.15±0.42 gm/dl, 5.09±1.38 gm/dl, 2.30 ±1.0 mg/dl, 52.22±10.61 mg/dl, 25.81±4.33 mg/dl, respectively. The mean ratio of the albumin and globulin was 0.643±0.13 which was relatively lower compared to the standard reference value. The albumin and globulin ratio might be used as a diagnostic profile of cats suffering from feline infectious peritonitis. We examined serum glutamic pyruvic transaminase (SGPT), serum glutamic oxaloacetic transaminase (SGOT), and alkaline phosphatase (ALP) in the blood serum to evaluate the functional rhythm of hepatocytes and sinusoidal endothelial cells of the liver that suffered from feline infectious peritonitis (Table 2). We found that the mean concentrations of SGPT, SGOT, and ALP were 22.32±16.91u/l, 10.48±4.48 u/l, and 48.27±33.11 u/l respectively. These findings indicated that the concentration of SGPT and SGOT was decreased in the blood serum of the cats affected with feline infectious peritonitis compared with a standard reference value of a healthy cat. This finding indicated that cats had been suffering from the functional activities of the liver, resulting in SGOT and SGPT increases in blood circulation.

Discussion

Feline infectious peritonitis (FIP) and COVID-19 are distinct diseases caused by different coronaviruses and affecting different species (Sweet *et al.*, 2022). A virulent feline coronavirus is disseminated via the mononuclear phagocyte system, while a nonvirulent feline coronavirus is associated with asymptomatic persistent enteric infections (Addie *et al.*, 2009). Most feline infectious peritonitis cases present abdominal distension and dyspnea as primary clinical signs and cats less than 2 years old are most susceptible (Addie *et al.*, 2009; Norris *et al.*, 2005; Thayer *et al.*, 2022). Previous research showed that the Scottish fold and Persian breeds were more susceptible among the pure breed cats (Moyadee *et al.*, 2019). Diagnosis of FIP is difficult due to the absence of specific clinical signs and confirmatory diagnostic facilities. Therefore,

a series of laboratory tests is necessary for the confirmatory diagnosis of feline infectious peritonitis in cats. Keeping a pet is a fashionable practice in Western developed countries like the USA, Japan, Canada, Australia, etc. So medical facilities for pet animals are equipped with modern technology in developed countries like the USA, Japan, Australia, Canada, etc. By contrast, in developing countries like Bangladesh, keeping pets is a new addition to the young generation and solvent families living in urban areas. Cats become infected with several infectious diseases without showing specific clinical signs and symptoms.

Pet practitioners face problems in the diagnosis of diseases, which is a bit difficult without a specific diagnostic test. Therefore, the diagnosis of diseases in pet animals in Bangladesh primarily is done by observing clinical signs and physical examination. Recently, a few research institutes and private organizations have installed basic diagnostic facilities for pet animals. Here, we investigate the hematology and biochemical profiles of feline infectious peritonitis-affected indigenous cats. In this study, we showed the clinical signs and symptoms, and blood and biochemical profiles of feline infectious peritonitis affected indigenous cats. We found that excess accumulation of inflammatory fluid in the peritoneal cavities and dyspnea was common in FIP-affected cats. Previous reports also showed abdominal distension due to fluid accumulation is common in purebred FIP-affected cats (Moyadee *et al*., 2024; Pedersen *et al*., 2015).

The accumulation of inflammatory fluid in the peritoneal cavity of FIP-affected indigenous cats was confirmed with the Rivalta test. Similarly, recent reports showed that Rivalta's test was used for the differential diagnosis of exudate and transudate especially in FIP-affected cats (Melnyk *et al*., 2022). In this study, we found that the erythrocyte sedimentation rate was increased in the suspected FIP-cats compared to a reference value. The increased erythrocyte sedimentation rate indicates the presence of inflammatory reactions in animals. Previous reports showed that anemia, neutrophilia, lymphopenia, and thrombocytopenia are blood profile parameters in cats affected with FIP (Norris *et al*., 2005; Thayer *et al*., 2022). We found that most of the red blood cell count parameters were in the range of standard reference values, except the percentage of red cell distribution width-coefficient of variation, which was increased in the blood of FIP-cats. In total platelet count, we found that the percentage of plateletcrit was decreased in a FIP-affected cat compared to the range of standard reference values of normal healthy cats. The red blood cell profiles usually depend on the severity of diseases. FIP-affected cats were taken at an early stage of disease; there might not have been significant changes in red blood cell parameters. Previous reports showed lower average values of haemoglobin (HGB), haematocrit (PCV), mean corpuscular haemoglobin (MCH) and mean corpuscular haemoglobin concentration (MCHC) though the average value of red blood cells (RBC) was within the limits in FIP affected cats (Boghian, 2023).

Blood chemistry showed that total protein was slightly increased in the blood serum of FIP-affected cats compared to the range of standard reference values of the healthy cat. The concentration of albumin, globulin, creatinine, urea, and blood urea nitrogen in blood serum was 3.15±0.42 gm/dl, 5.09±1.38 gm/dl, 2.30 ±1.0 mg/dl, 52.22±10.61 mg/dl, 25.81±4.33 mg/dl, respectively. The mean ratio of the albumin and globulin was 0.643±0.13, which was relatively lower compared to the standard reference value. Previous reports strongly recommend that a lower ratio of albumin and globulin in serum is an indication of FIP infections. Similarly. Cengiz *et al*. showed that albumin and globulin ratios were found to be significantly lower in cats with FIP than those of control cats (Gökce and Cengiz, 2019). Moreover, serum biochemical anomalies commonly associated with FIP include hyperproteinemia, hyperbilirubinemia, hyperglobulinemia, and hypoalbuminemia. Hyperglobulinemia is also observed in conditions such as lymphoma, multiple myeloma, and persistent infections (Gao *et al*., 2023). When cats with FIP exhibit hyperglobulinemia, hypoalbuminemia, and hyperproteinemia, it frequently manifests as a common laboratory anomaly. Previous reports also identified hyperglobulinemia and hypoalbuminemia in cats with FIP, but no increase in total protein levels was observed (Moyadee *et al*., 2019).

Therefore, the albumin and globulin ratio might be used as a diagnostic tool for indigenous cats suffering from FIP. We found that the mean concentration of SGPT, SGOT, and ALP was 22.32±16.91u/l, 10.48±4.48 u/l, and 48.27±33.11 u/l, respectively.

These findings indicated that the concentration of SGPT and SGOT was slightly decreased in the blood serum of the cats affected with feline infectious peritonitis compared with a standard reference value of a healthy cat. This finding indicated that cats had been suffering from FIP, showing increased functional activities of the liver, resulting in SGOT and SGPT decreases in the blood circulation. Similarly, Melnyk *et al.* showed that liver-specific enzyme activities increased in FIP-affected cats (Melnyk *et al.*, 2022).

The limitations of the study were the small sample size, lack of confirmatory diagnosis via molecular techniques like polymerase chain reaction, and reliance on clinical signs, and rapid kit test and routine hematological and biochemical test.

Conclusion

This study provides the first insight into the hematological and biochemical profiles of feline infectious peritonitis (FIP) in indigenous cats of Bangladesh. Through clinical evaluations, Rivalta's test, and laboratory analyses, we confirmed consistent alterations in various hematological and biochemical parameters among FIP-suspected cats. Notably, elevated total white blood cell counts, erythrocyte sedimentation rates, and total protein levels, along with decreased albumin-to-globulin (A: G) ratios, were common findings across all cases. The A: G ratio, in particular, was found to be significantly lower (0.643±0.13) than the standard reference value, suggesting its potential as a reliable diagnostic marker for FIP in indigenous cats, as it has been for purebred counterparts in previous studies. Biochemical findings such as increased levels of serum bilirubin, creatinine, urea, and liver enzymes (SGPT, SGOT, and ALP) further reflect the systemic impact of FIP, including hepatic and renal involvement. These alterations support the pathological nature of the disease and underscore the need for timely diagnosis and management. This preliminary investigation highlights the diagnostic value of hematological and biochemical profiling, particularly the A: G ratio, in suspected FIP cases among local cat populations. Further studies involving larger sample sizes and molecular confirmation are recommended to strengthen diagnostic protocols and improve disease management strategies for FIP in Bangladesh's indigenous feline population.

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Novelty statement

Several studies have shown the occurrence and prevalence of feline infectious peritonitis in Bangladesh, irrespective of the breed of cats. By contrast, reports on hematological and biochemical parameters of indigenous cats infected with feline infectious peritonitis were limited. This study is novel as it will correlate the hematological and biochemical values with those of other exotic breeds and the standard values of the automated blood and biochemistry analyzer machine. The findings provide new evidence for using hematological and biochemical indices of feline infectious peritonitis-infected indigenous cats of Bangladesh.

Authors' Contribution

JA: Conceptualization, data curation, formal analysis, investigation, resources, supervision, visualization, writing: Review and editing, data curation, funding acquisition, methodology, software, validation, writing-original draft, project administration. MMR: Data curation, investigation, writing review and editing. NN: Data curation, writing review and editing. TS, MMI, SS: Writing review and editing. All authors have read and approved the final manuscript.

Generative AI and AI-assisted technology statement

The authors declare that no generative AI or AI-assisted technologies were used in the writing or editing of this manuscript.

Conflict of interest

The authors have declared no conflict of interest.

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