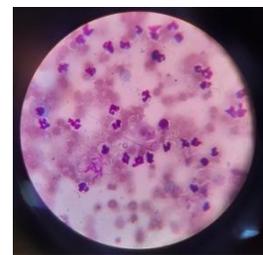


DIAGNOSTIC IMAGING CASE OF THE MONTH

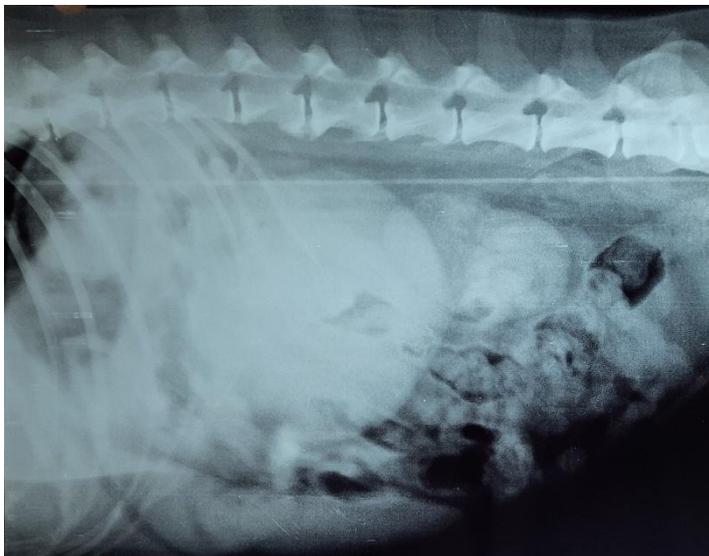
In Collaboration with Indian Society for Veterinary Surgery

HISTORY

A 13year old spayed female golden retriever was presented to department of VSR of Veterinary college Shivamogga with a history of dysuria, stranguria and hematuria since one month. Physical examination revealed temperature of 102°F with no abnormality detected on auscultation of heart and lungs. Palpation of abdomen revealed a hard orange sized mass in the cranial abdomen. Urinalysis revealed reddish brown colored urine with pH-5.0, specific gravity-1.033 with plenty of RBCs and pus cells. CBC and serum biochemical revealed, TE C-4.39X10⁶/μl, TLC-9100X10³/μL, Hb-9.1g%, PCV-27%, platelet count of 376000/ μL, blood urea nitrogen level of 147.6mg/dL, creatinine-1.81mg/dL, SGPT-47.57IU/L and serum cholesterol of 208.74mg/dL respectively.



Orthogonal radiographs revealed a big round radio dense mass occupying the cranial abdomen.



On B mode ultrasonography, right kidney was not adequately seen and a huge heterogenous mass of size 12.0x 11.0 x 13.0cms was seen replacing whole of the kidney causing loss of renal contour. Colour flow doppler ultrasonography of the mass revealed neovascularization. The mass was involving the Gerota's fascia and invading into the renal pelvis. There was large

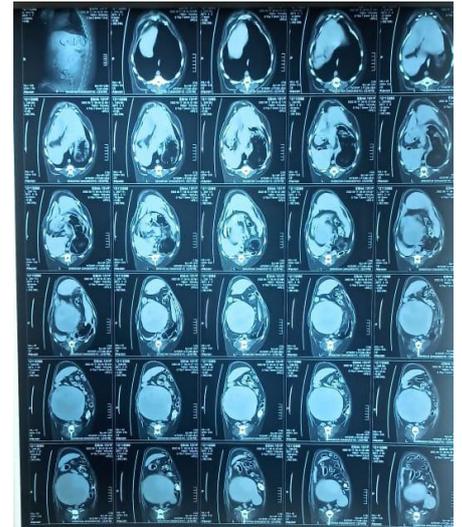
cystic/necrotic degenerative changes within it with no calcification. Abdomen aorta & inferior vena cava was normal. Thus, based on blood and urinalysis, radiographic and ultrasound findings, the case was diagnosed as “**Cystitis with renal carcinoma**”.



The animal was kept on Tab Enrofloxacin @ 5 mg per kg PO SID, Tab Piroxicam @ 0.3 mg per kg PO SID and multivitamin for 21 days. Fifth day of treatment on telephone conversation we came to know that animal is leading better healthy life and we continued treatment for 3 weeks. Animal showed improvement by way of cessation of abdominal pain and a healthy life style for the said period i.e, 21 days. However, the urine colour changed from dark reddish brown to light red colour. Owner was advised for further diagnostic investigation with Computed tomography, Ultrasound guided fine needle aspiratory cytology, histopathology and biopsy.

Ultrasound guided FNA of right renal mass from solid area and cystic area was done. Few drops creamish material from solid area and 0.5 ml of blood tinged fluid from the cystic area was aspirated. Smears showed necrotic debris ,scattered neutrophils, macrophages and few loosely cohesive cells with degenerated enlarged nuclei indicating “**tumor necrosis**”. Smear for AFB(Acid fast bacilli) was negative.

CT scan of right kidney showed a large heterogenous mass of size 12.0 x 11.5 x 13.0 cms seen arising from and occupying the supero-dorsal surface of upper and mid pole replacing the whole contour of the right kidney. The mass was seen involving both the Corticomedullary region causing distortion of the underlying pelvi calyceal system with large part of central cystic/necrotic degenerative changes within it. Based on CT scan, the case was diagnosed as RIGHT RENAL CARCINOMA (STAGE II b No Mo). Owner was advised for right nephrectomy, however, owner declined for surgery. Hence, animal was kept on medical management viz., Tab Cefixime @ 10 mg per kg PO BID, Tab Metronidazole @ 10 mg per kg PO BID, Tab Piroxicam @ 0.3 mg per kg PO SID and multivitamin for 21 days.



Monitoring of the case for over 09 weeks by way of series of complete blood count and serum biochemical examination revealed, normal TEC, Hb and Creatinine level. Animal died after 09 weeks and owner was satisfied with the pain free quality of life spent by the animal especially the pain management with Tab Piroxicam @0.3 mg per kg SID, per OS for 3 months.

Parameter/Date	23/03/2022 before	16/04/2022 (0day)	23/04/2022 (07day)	10/05/2022 (3 rd week)	28/05/2022 (6 th week)	21/06/2022 (9 th week)
TEC(X10 ⁶ /μL)	6.39	5.97	4.39	4.37	5.37	4.98
Hb(g%)	14.1	13.5	9.1	9.7	11.8	10.9
PCV (%)	40	36.4	27	26.8	33	29.1
MCV(fl)	62.7	61.0	61.7	61.5	61.5	58.6
MCH(pg)	22.0	22.6	23.2	22.1	21.9	21.8
MCHC(g/dL)	35.2	37.0	37.7	36.1	35.7	37.4
TLC(X10 ³ /μL)	15.1	12.9	9.1	11	9.4	16.7
Platelets(μL)	427000	373000	376000	420000	502000	505000
Creatinine(mg/dL)	1.38	1.12	1.81	1.39	1.15	1.3

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2. Birdane, F.M., Hatipoglu F., Ortatatli, M., Koc, Y and Turgut K (2004): Renal Cell Carcinoma in a Dog: Pathologic and Cytologic Findings. *Revue Méd. Vét.*,155, 3, 212-216.