

## Traditional Chinese Veterinary Medicine Approach for Canine Inflammation Bowel Disease Therapy

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### INTRODUCTION.

IBD is thought to originate as a consequence of a deregulation of mucosal immunity in predisposed animals<sup>3</sup>. The loss of tolerance to antigens (food, intestinal bacteria, *etc.*) is one of the most studied mechanisms that could justify the development of chronic intestinal inflammation<sup>1,4,6</sup>. The main difficulties in treating dogs with IBD originate from an incomplete understanding of the pathophysiological basis of these diseases. Mostly therapy will fall between steroid and other immunosuppressive drug, metronidazole antibiotic and novel food. However this case usually recurrence without unidentifying aetiology.

Chronic indigestion or secondary to the inflammation in chronic recurrence IBD mostly cause by the Damp that accumulate in the spleen and intestine<sup>2</sup>. Damp interferes Spleen to transforming and transporting food which leads to loose stool. Damp that to long accumulate in the Spleen will damage Spleen *Yang* and *Qi*. The Spleen will lose one of its main function to controlling the Blood which is keeps the blood circulating within vessels, prevent extravasation leading to bloody diarrhea and anemia<sup>7</sup>.

### CASE REPORT

George, an eleven-years old, intact male Maltese, 5 kg, who presented with bloody diarrhea recurrence for 2 years. Bloody diarrhea will stop for a few weeks with short term steroid, but will flare up anytime with unidentifiable cause. Recently, George experience severe profuse bloody diarrhea that contain large amount of fresh blood and mucus together with loose stool. He was weak, pale, anorexic and had an abdominal pain. Natif feces only shows overgrowth bacilli bacteria and red blood cell. CBC show anemia and thrombocytopenia (RBC  $2,73 \times 10^{12}/L$ , HGB 7,3 G/DL, HCT 20,22 %, PLT  $135 \times 10^9$ ). No abnormality in blood chemistry, only mild changes in electrolyte cause by dehydration. Endoscopy result reveal severe colitis ulcerative multifocal. He receive prednisolone full dose 1 mg/kg bb bid for 3 weeks and taper off; metronidazole antibiotic 10

mg/kg bb for 2 weeks. At 2nd weeks of prednisolone, Goerge liver enzyme ALP has reach 1000 U/L and ALT 560 U/L, he experience pain in cranial abdomen, and bloody stool again if prednisolone stop. He then suggest to receive acupuncture and herbal medicine from TCVM.

### TCVM Examination.

George is Earth Constitution, pale mucosa membran and tongue with sticky white yellowish tongue coat. Pulse deep weak, *Shen* good, cold ear and extremity. Loose stool with jelly mucus and blood. Earth constitution predisposed to have gastrointestinal problem from TCVM perspective. Pulse deep and weak was indicative for *Qi* deficiency. Chronic bleeding, anemia, bloody and loose stool and cold extremity was indicative for Spleen *Qi* Deficiency. Mucus bloody diarrhea is Damp Heat. TCVM diagnosis was Spleen and Large Intestinal Damp Heat and Spleen *Qi* Deficient. The goal of the treatment is clear Damp Heat and nourish Blood.

### TCVM Treatment.

Acupuncture session every twice a week, and maintenance every once or two week until there is a clinical improvement. Herbal use Yunan Baiyao was discontinued once bleeding stop, while Da Xiang Liang Wan and Gui Pi Tang still continue to reach maintenance dose.

According to the TCVM diagnosis, the following points and herbal formulas were selected is list in table below.

Tabel 1. Acupoint selected and needling method

Accupoints	Indication
1.	Electroacupuncture (needle depth 0,5 cun, 20/120 Hz, 15 minutes)
BL 20	Back-shu association point for spleen, spleen Deficiency, damp, digestive disorders, watery and bloody diarrhea, anemia.
BL 21	Back-shu association point for stomach, diarrhea
BL 22	Back shu association for triple heater, damp and diarrhea

	BL 24	Sea of Qi, Qi Deficiency, diarrhea
	BL 25	Back-shu association point for the large intestine, Diarrhea
	Bl 26	Gate of Yuan-source Qi, diarrhea
	Bai hui	Yang Deficiency, Diarrhea
	GV 4	Diarrhea from Yang deficiency
2.	Plain Needle (needle depth 0,5 cun, 10 min, tonification manipulation)	
	SP 3	Shu stream point (earth), yuan source point, diarrhea
	SP 6	Tonifies Yin and Blood, diarrhea
	SP 9	Clears Damp and diarrhea
	SP 10	"Sea of Blood", Blood deficiency, blood heat, heat toxin.
	ST 25	Alarm point for Large intestine, inflammation bowel disease.

Tabel 2. Herbal use for canine IBD

Herbal Formula	Doses	Indication
Da Xiang Lian Wan	1/3 cap 500 mg, bid	Move Qi, clears damp heat in the intestine
Gui Pi Tang	1 tea pill, bid	Tonify Spleen, nourish blood
Yunan Bai Yao	1 cap, bid	Stop bleeding

## RESULT AND DISCUSSION

Bleeding volume decrease in 8 days and Yunan baiao was discontinued after bleeding completely stop at 12 days. Acupuncture session still continue for 4 weeks, and stool start hardening in one month, but mucose membrane getting pale. Herbal Chinese *Da Xiang Lian Wan* and *Gui Pi Tang* still continue together with prednisolone. One month episode of prednisolone was discontinued after taper off, stool remain hard without blood. All western medicine was discontinued, while acupuncture and Chinese herb still continue to maintain stable clinical condition. After 2 month hematocrit, RBC, HGB already reach normal range (RBC  $5,8 \cdot 10^{12}/L$ , HGB 12,0 G/DL, HCT 35 %, PLT  $200 \cdot 10^9$ ) and ALP, ALT enzyme liver decrease reach normal range (ALP 273 U/L, ALT 80 U/L).

Inflammation Bowel Disease is chronic intestinal inflammation, mostly in colon. The gold standard to identify the cause and pathological change is by biopsy. IBD treatment itself usually will resolve once steroid start to be administered. However, long term effect of steroid will damage liver.

TCVM work by controlling Damp that accumulate in spleen and intestine. From TCVM perspective Damp is wet and humid that interferes Spleen normal function. Use of electroacupuncture on Bladder point, *Baihui* and GV 4 will give strong stimulation to tonify Qi Spleen,

stomach, large intestine and triple heater. Dry needle use for Spleen point was because the acupoint is thin and located at pelvic limb extremity (table 1).

Chinese herb use *Da Xiang Lian Wan* has been approved to eliminate damp heat in the intestine<sup>5</sup>. *Gui Pi Tang* will nourish blood and promotes Qi Spleen. Since IBD cause for this case cannot be identified, acupuncture and herbs use for long life maintenance depend on clinical progress.

## CONCLUSION

Acupuncture and herbal use is good alternative treatment of choice for recurrence IBD, while use of steroid and immunosuppressive long term doesn't help and higher risk of liver damage.

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