

TCVM Palliative and End-of-life Case Study

Signalment:

“Chase”

12 year-old, neutered male, Golden Retriever



Figure 1. Chase doing weave poles.

Owner’s Complaint and History:

Chase was presented to Western Carolina Animal Pain Clinic one month after the diagnosis of 10 cm, central to left sided, hepatocarcinoma in the liver by the Upstate Veterinary Specialist Group. The stomach was displaced by the mass and there was evidence of enteritis on the ultrasound. He had been experiencing diarrhea and weight loss for approximately one month prior to the visit. The diarrhea had just resolved. His caretakers reported that he had good energy because he would still enjoy his walks and would still play ball. He did have some issues with intermittent stiffness that would respond to 25 mg of deracoxib. His hearing had diminished over a 6 month period. He prefers cool areas to rest but he used to enjoy laying in the sun. His diet consisted of a raw diet, goat’s milk, beef and fried eggs. He was taking the following supplements: fish oil, glucosamine, and digestive enzymes.

Owner’s Goals and Psychosocial Needs:

His owner’s goals were to preserve quality of life as long as possible without surgery or chemotherapy. Since there was a definitive Western diagnosis, they choose not to have any additional testing performed. They preferred palliative treatment of his clinical signs as his health changed. They were open to conventional and TCVM therapies. Both of his owners worked but were able to care for him if he became debilitated and could afford whatever supportive care Chase needed. His home environment did not present any challenges for his care. Chase’s owners supported euthanasia if he could not sustain a good quality of life. Chase was a retired agility dog.

Western Examination:

Chase was bright and alert. He was eager to eat treats. His mucous membranes were pink. His heart rate was 80 with a respiratory rate of 24. His temperature was 101 degrees. His body score was a 4 out of 9. Chase weighed 26 kg. He had grade 1 dental calculi on his teeth but no gingivitis. There was a slight decline in his rear limb proprioception which was worse on the right. There were no gait deficits but he was weak in the rear limbs. There was no pain identified and his range of motion was normal in all joints. His liver mass was not palpable. Chases heart and lungs were normal.

TCVM Examination:

Chase had an Earth Constitution with a little Fire component. His tongue color was lavender with a thin with coat. His pulse was weaker on the left but still strong. He was panting intermittently and was hot when his ears were palpated.

TCVM Diagnosis:

Spleen *Qi* Deficiency

Liver Blood Stagnation

Kidney *Yin* Deficiency

TCVM Treatment Principles:

Tonify Spleen *Qi*
Resolve stagnation
Tonify Kidney *Yin*

Western Diagnosis:

Neoplasia (liver)
Differential diagnosis of Type 2 IVDD

TCVM Treatment:

Acupuncture: GV-20, GV-14, BL-18, BL-20, BL21, BL-23, BL-40, *Bai-hua*, ST-36, ST-40, LI-10, LIV 3 (Table 1) ¹
Wei Qi Booster (JT) (Table 2)

Stasis Breaker (JT) (Table 3)

Tui-na: *Nie-fa* from tail to head 5 times twice to three times daily.

Diet changes:

Cook food and change to neutral diet with beef as the primary protein. Instead of fried eggs, replace it with boiled eggs.

Treats: Clams, almonds, pears, apples, sweet potato²

Table 1. Acupuncture treatment

| Treatment Principle | Acupuncture Point | Acupoint Indications or Attributes |
|---|-------------------|---|
| Tonify Spleen <i>Qi</i> Resolve stagnation Tonify Kidney <i>Yin</i> | GV-20 | Crossing point of GV and BL Channels, sedation point, <i>shen</i> |
| | GV-14 | IVDD, clear heat |
| | BL-18 | Back-shu association point for liver, liver disease, thoracolumbar intervertebral disease |
| | BL-20 | Back-shu association point for spleen, spleen deficiency, digestive disorders, thoracolumbar intervertebral disease |
| | BL-21 | Back-shu association point for stomach, gastrointestinal and pancreatic disease, loss of appetite, diarrhea, vomiting, constipation and generalized weakness |
| | BL-23 | Back-shu association point for kidney, kidney <i>Yin</i> and <i>Qi</i> deficiency, pelvic limb weakness, thoracolumbar intervertebral disk disease, coxofemoral osteoarthritis |
| | BL-40 | <i>He-sea</i> point (earth), master point for caudal back and coxofemoral joints, dysuria, IVDD, vomiting, diarrhea, pelvic limb paresis or paralysis |
| | <i>Bai-hua</i> | Yang deficiency, pelvic limb paresis/paralysis, lumbosacral pain, lumbosacral IVDD, abdominal pain, diarrhea |
| | ST-36 | Master point for GI tract and abdomen, <i>He-sea</i> point (earth), , horary point, nausea, vomiting, stomach pain, diarrhea, constipation, <i>Qi</i> tonic, rear limb 3 mile point, stifle pain and rear limb weakness |
| | ST-40 | <i>Luo</i> -connecting point of the stomach channel, influential point for phlegm, obesity, lipoma, pruritus, edema, constipation, epilepsy, pelvic limb paresis or paralysis |
| | LI-10 | Thoracic limb 3 mile point, <i>Qi</i> deficiency, wind-heat, immunodeficiency, pruritus, immune regulation, diarrhea, abdominal pain, thoracic limb lameness, elbow pain, dental pain, pelvic limb lameness, generalized weakness |
| | LIV-3 | Shu-stream (earth), Yuan-source point, Liver <i>Qi</i> stagnation, |

| | | |
|--|--|---|
| | | liver and gallbladder disorders, urogenital, abnormal heat, pelvic limb paresis/paralysis, pain |
|--|--|---|

Table 2. Ingredients and Actions of *Wei Qi Bu (Wei Qi Booster-JT)* ³

| English Name | Chinese Pin-Yin | Action |
|--------------|----------------------------|--|
| Astragalus | <i>Huang Qi</i> | Tonify <i>Qi</i> and <i>Wei-Qi</i> |
| Angelica | <i>Dang Gui</i> | Tonify and move Blood to resolve Stagnation |
| Codonopsis | <i>Dang Shen</i> | Tonify <i>Qi</i> and boost <i>Wei Qi</i> |
| Lindera | <i>Wu Yao</i> | Move <i>Qi</i> and clear stagnation |
| Citrus | <i>Chen Pi</i> | Move <i>Qi</i> and resolve stagnation |
| Lobelia | <i>Ban Bian Lian</i> | Clear Heat and inhibit cell mutation |
| Oldenlandia | <i>Bai Hua She She Cao</i> | Clear Heat and inhibit cell mutation |
| Scrophularia | <i>Xuan Shen</i> | Cool Blood and nourish <i>Yin</i> , resolve stagnation |

Table 3. Ingredients and Actions of *Stasis Breaker-JT* ⁴

| English Name | Chinese Pin-Yin | Action |
|--------------|----------------------------|---|
| Fritillaria | <i>Zhe Bei Mu</i> | Soften hardness, clear nodules |
| Ostrea | <i>Mu Li</i> | Soften hardness, clear mass |
| Sparaganium | <i>San Leng</i> | Purge interior, break stasis and clear mass |
| Zedoary | <i>Er Zhu</i> | Purge interior, break Blood stasis and clear mass |
| Scutellaria | <i>Ban Zhi Lian</i> | Clear Heat-toxin, inhibit cell mutation, inhibit tumor growth |
| Oldenlandia | <i>Bai Hua She She Cao</i> | Inhibit cell mutation and tumor growth |

Integrative or Western care:

- Deramaxx (deracoxib)
- Doxycycline- antibiotic/anticancer ⁵
- Other supplements-glucosamine and agaricus
- Therapeutic exercise
- Cavellettis start slow (2 minutes) and increase over time
- Weight shifting 5 minutes twice daily
- Walking 15 to 25 minutes three times per day
- Keep a daily journal listing activities, comfort and any health changes.
- See Table 4 for treatment summary.

Table 4. Treatment Summary

| Visits | Plan | Observations or New Problems |
|-----------------------|---|---|
| First visit (9/24/15) | Evaluation, TCVM diagnosis and treatment planning, started <i>Wei Qi</i> Booster (JT) and <i>Stasis Breaker</i> (JT) at a low dose of 0.5 grams once daily to evaluate tolerance and introduced them separately starting with <i>Wei Qi</i> Booster (JT), over the next 4 weeks the herbals were dosed at 0.5 grams per 10 # BID, physical exercise plan, slowly integrate in the <i>agaricus</i> | See initial examination |
| Week 2 (10/8/15) | DN, <i>Tui-na</i> added (<i>Nie-fa</i>), added conventional medications of deracoxib and doxycycline, stopped deracoxib after 3 days and stopped herbal formulas temporarily | Tolerating herbals but when deracoxib was added there was a loss of appetite and soft stool |
| Week 4 (10/21/15) | DN, restart herbal formulas, restart doxycycline | Appetite returned after the deracoxib was discontinued |
| Week 6 (11/2/15) | DN, herbals at therapeutic dose | Appetite good |
| Week 8 (11/23/15) | DN. Discussed restarting NSAID with caution upon owner's request. Continue with herbal formulas and supplements. Added conventional medications sucralfate 1 gram BID and famotidine 0.5mg/kg BID | Diarrhea and anorexia 7 days after NSAID was reintroduced |
| Week 10 (12/10/15) | DN, NSAIDS should not be reintroduced no matter what | Normal appetite and bowel habits |
| Week 13 (12/31/15) | DN, discontinued sucralfate and famotidine | Normal appetite and bowel habits |
| Week 15 (1/12/16) | DN | Doing great |
| Week 17 (1/20/16) | Acute onset of right rear lameness (grade 2), effusion palpated in stifle joint, differential includes a partial anterior cruciate ligament tear. Treatment of DN, rest, ice, and Body Sore (JT) at 0.25 gram per 10 pounds working up to 0.5 grams BID for 2 weeks. | Doing well with digestion |
| Week 18 (1/27/16) | DN, continue with Body Sore | Tolerating herbals and lameness is improving to grade 1. Tongue purple to lavender, pulses |
| Week 22 (2/24/16) | DN, stop Body Sore (JT) | Lameness resolved |
| Week 26 (3/23/16) | DN | Doing well |
| Week 30 (4/27/16) | DN, vestibular event diagnosed by RDVM | |
| Week 31 (5/5/16) | Euthanasia was performed in the hospital. A combination of dexmetomidine, acepromazine and torbutrol was administered IM. After 15 minutes an IV injection of Fatal Plus was given in the lateral saphenous vein. There was no adverse reactions during the process. | Condition declined, Chase was weak, depressed and anorexic. |

Discussion and outcome:

Chase was treated for a duration of 31 weeks or almost 8 months. Because of Chase's Earth Constitution and Spleen Qi Deficiency that predisposed him to diarrhea, his care was planned mindfully in regards to integrating herbal formulas into his care plan. Chase was started on low doses of herbal formulas which were introduced one formula

at a time starting with 0.5 grams once daily. The formulas were slowly increased to a full therapeutic dose over the course of 3 weeks. The herbals were withheld during any time of decreased appetite and then slowly reintroduced. Conventional Western medications were also used to help support his conditions. Some changes that may have helped support him would be to include a Spleen Qi tonic like Eight Gentlemen (JT) and Liver Happy (JT) as a transporter to the liver. A choice was made to support his appetite and liver through acupuncture because of his sensitive digestive tract. On April 27, 2016 his condition started to decline. He was diagnosed with a vestibular event by his local veterinarian on emergency. Unfortunately, despite efforts to support him, his quality of life became poor. Chase was euthanized on 5/5/16 when he became anorexic, weak and could not stand on his own. Euthanasia was performed in the hospital. A combination of dexmetomidine, acepromazine and torbutrol was administered IM. After 15 minutes an IV injection of Fatal Plus was given in the lateral saphenous vein. There was no adverse reactions during the process. Follow-up with the owners included a sympathy card and one phone call to check in over a 3 week period.

Footnotes:

- JT: Dr. Xie's Jing Tang Herbal, Inc. Reddick, FL

References:

1. Xie H, Preast V. Xie's Veterinary Acupuncture. Blackwell Ames, IA 2007.
2. Xie H, Wedemeyer L, Chrisman C, Trevisanella L. Practical Guide to Traditional Chinese Veterinary Medicine. Chi Institute Press Reddick, FL 2014, 589
3. Xie H, Chinese Veterinary Herbal Handbook, 3rd ed, Jing Tang Publishing, Reddick, FL 2012, 76.
4. Pg. 155.
5. Barbie DA, Kennedy BK. Doxycycline: new tricks for an old drug. Oncotarget 2015; 23:19336-37.