



XXIV S.I.A.V. International Congress
The "Three treasures" in the geriatric animal
Rome, Italy 12-14 October 2023



SHEN DISTURBANCES IN GERIATRIC DOGS



G.Galassi, DVM
Napoli (Italy)
info@savenapoli.it



Shen: Spirit, Mind

神

Jingshen jibing: Shen Disturbances

Jingshen jibing: Modern Chinese

Qingzhi jibing: Classics

Chi Dai: Dementia

“Kidney deficiency tends to mind insufficiency”

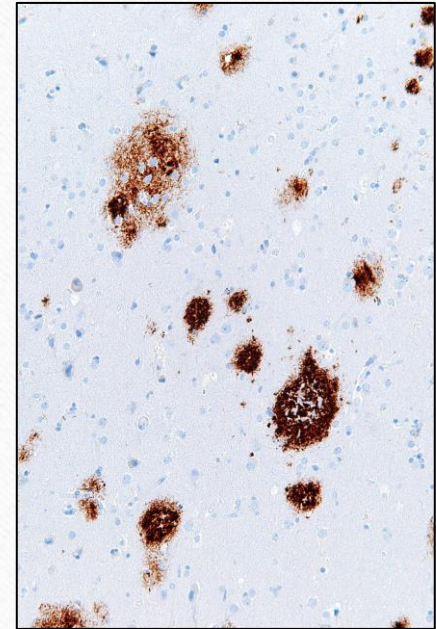
“Dementia tends to have copious Phlegm”

Canine Cognitive Dysfunction

The Cognitive Dysfunction Syndrome (CCD) is a neurobehavioural disorder consisting in a progressive loss of cognitive abilities that leads to changes in personality, habits and responses to stimuli. Studies evidenced a strict parallelism between progression of cerebral ageing in dogs and humans: in both there is an increased deposition of beta-amyloid protein and the behavioural changes are comparable.

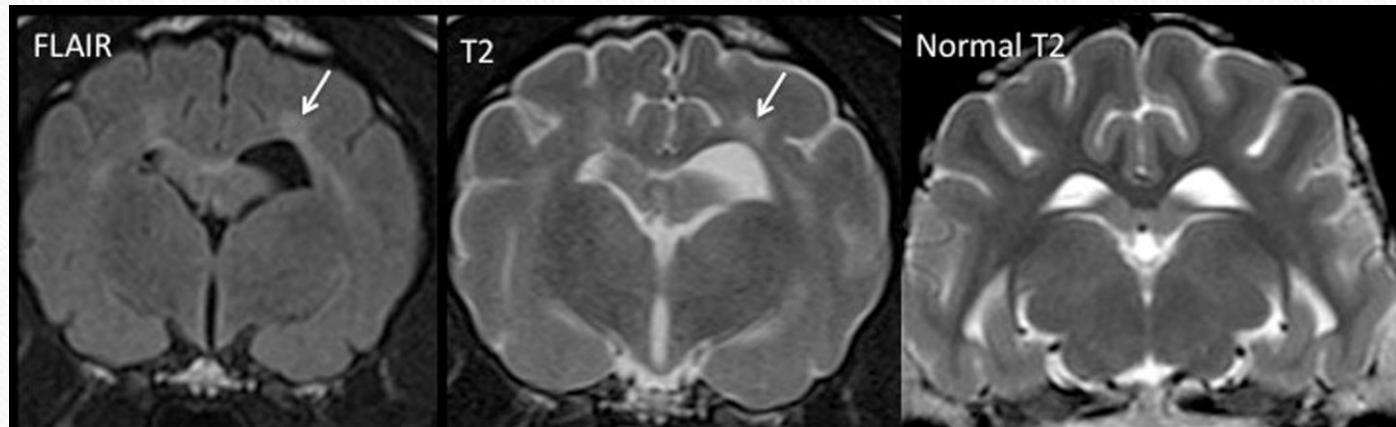
Pathogenesis

- Vascular changes
- Beta- amyloid deposition
- Neuronal damage
- Lowered levels of acetylcholine, dopamine, norepinephrine and GABA
- Cortical and cerebral atrophy
- AARS dysfunction in thalamus and cortex information



Diagnosis

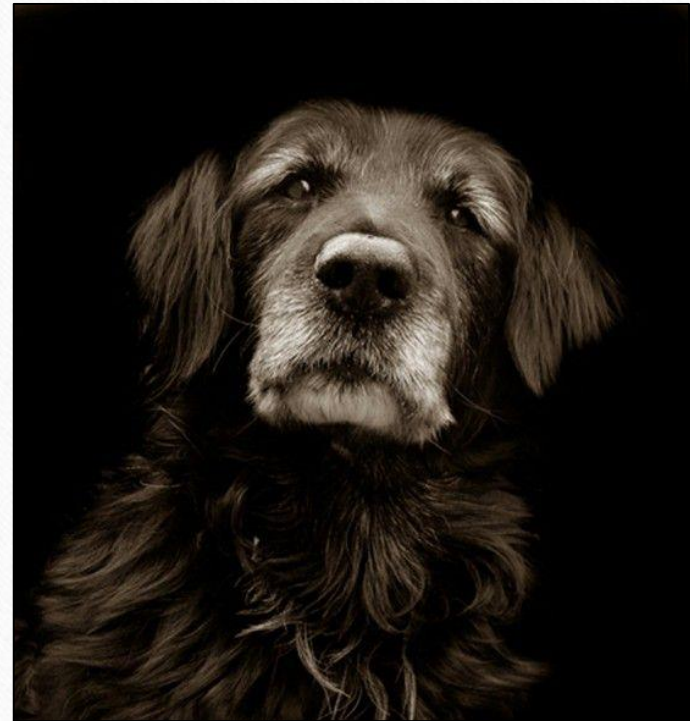
- MRI
- Anamnesis



Transverse fluid-attenuated inversion recovery (FLAIR) and T2-weighted (T2w) MRI of normal and affected brain showing bilateral hyperintense periventricular white matter lesions, referred to as leukoaraiosis (white arrows).

Symptoms

- Disorientation
- Social and enviromental Interactions
- Sleep- awake cycles
- House soiling, learning and memory
- General Activity
- Anxiety



Change in appetite	2 (7)	5 (14)	Decreased interaction	4 (15)	19 (51)	No recognition of the owner on a daily basis	0	0
Polydipsia	8 (30)	8 (22)	No contact with the environment/owner	0	2 (5)	Aggressive toward the owner	0	5 (14)
Urinating and defecates in the house	0	11 (30)	Collides with furniture	0	4 (11)	Anxiety	3 (11)	17 (46)
Sleeps during the day, restless at night	0	21 (57)	Tries to pass through narrow spaces	0	8 (22)	Separation anxiety started after the age of 8 years	2 (7)	6 (16)
Sleeping increased	19 (70)	10 (27)	Tries to pass through the wrong side of the door	1 (4)	6 (16)	Irrational reaction/fear to well-known objects	1 (4)	11 (30)
Stereotyped walking	1 (4)	14 (38)	Disoriented on daily walks	0	7 (19)	Reduced ability to learn new tasks	0	4 (11)
Circling	0	3 (8)	Disoriented at home	0	18 (49)	Reduced ability to perform known tasks	0	5 (14)

Bu Mei: Insomnia

«Bu Mei can be present in many illnesses but it is important to understand that sleep has its roots in the yin , Shen is its master, if Shen is peaceful then there is sleep, if Shen is not peaceful there is no sleep. The reason why there is no peace is that pathogenic Qi is disturbing or because Yin is not sufficient»

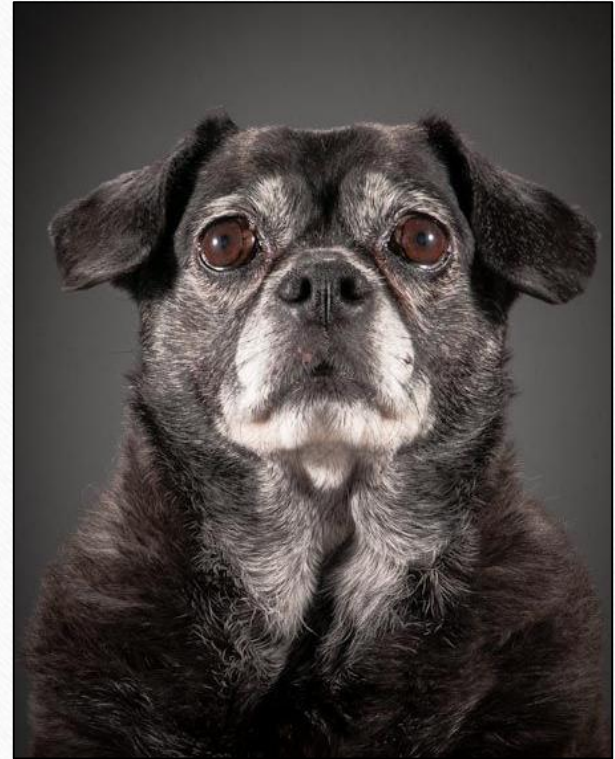
«Worrying and excessive thinking injure the Spleen so that it cannot make Blood, Shen and Hun are deprived of their residence and insomnia results»

Deficiency

- Yin or Blood of Ht and Lv

Excess

- Heat, Emotions



Shui Yi: Drowsiness

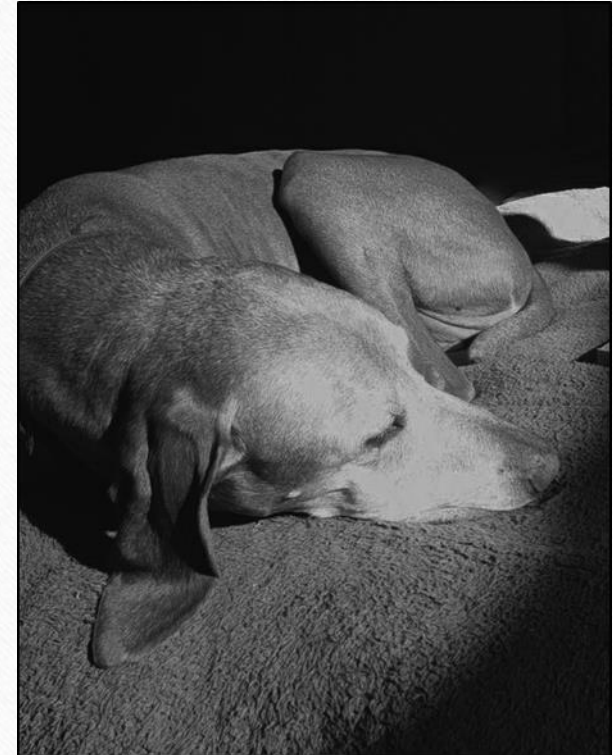
«Wei Qi flows within the Yang during the day and within the Yin during the night. When Yang slows down there one feels sleepy, when the yin slows down one is awake. When Stomach and Intestine are big, Wei Qi lingers inside them for long time, skin is obstructed by humidity...Wei Qi slows down, lingers too much within the Yin, Qi is not purified, then there is drowsiness»

Deficiency

- Qi or Blood deficiency of Ht and Sp

Excess

- Humidity or Phlegm



Yu: Stasis (Depression)

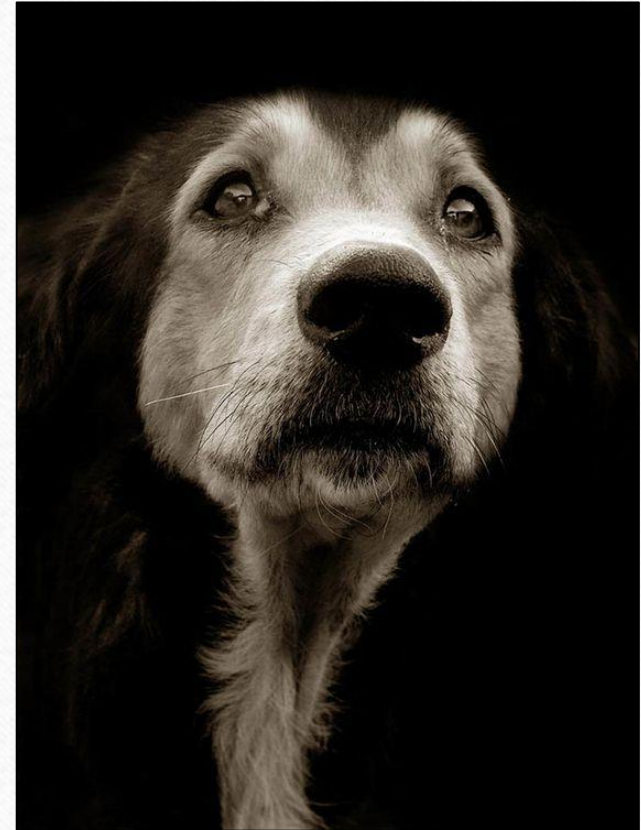
«In the six stasis is stasis itself the cause of illness. In emotional stasis is the illness (the emotion itself) the cause of stasis.»

Deficiency

- None in the early stages

Excess

- Lv Qi, Blood, Phlegm, Emotions



Jing Ji: Anxiety

«In both Jing Ji (Fear and Palpitation) and Zheng Chong (Pulsing Panic) there is Blood deficiency. The first comes in waves, the second is constant. (...) it causes agitation that causes deficit and then creates Phlegm-Heat»

Deficiency

- Yin or Blood deficiency of Ht and Lv

Excess

- Phlegm



Fan Zao: Restlessness

«One cannot see with clarity, heart is like hanging, like when one is hungry, if Qi is insufficient than one can be easily frightened, heart is in alarm like if one is about to be captured»

Deficiency

- Yin or Blood deficiency of Ht and Lv
- Yang deficiency (Yin Zao)

Excess

- Heat, Phlegm, Fire



Diankuang: Madness

«Hun and Po are unsettled, Blood and Qi are lacking, Blood and Qi are pertinence of the Heart, if Heart is empty one is fearful, willing to sleep, dreaming away, Jing and Shen separate and disperse, Hun and Po move recklessly, if Yingqi is weak, this is Dian, if Yangqi is weak then is Kuang.

«In Kuang madness and disorder develop progressively and very seldom they can be healed (...). In Dian one is numb, tired, quiet»

Deficiency

- None

Excess

- Phlegm, Phlegm- Fire

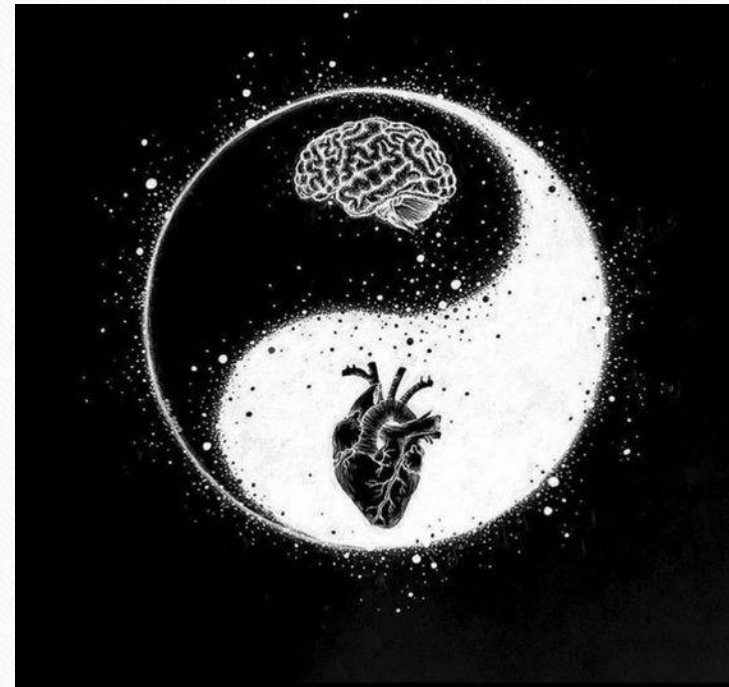


Zhen Duan: Diagnosis

«Shen is Beyond Yin and Yang, it cannot be evaluated or measured in terms of Yin and Yang, thus the condition of Shen cannot be directly seen in tongue diagnosis.(...) Heart houses the Shen(...) when Blood and Yin nourish the Heart, sleep is regular, mind is clear, emotions are balanced»

Deficiency Syndromes

- Qi deficiency of Heart
- Heart Yin deficiency
- Heart Blood deficiency
- Heart Yang deficiency



Excess Syndromes

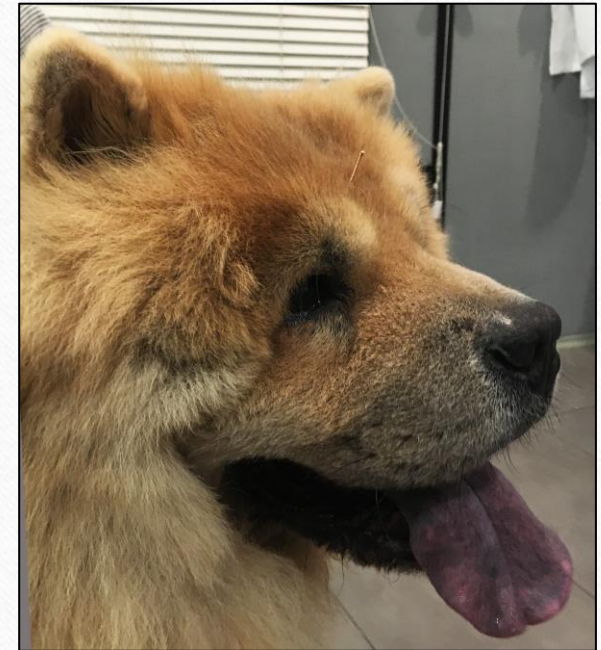
- Liver Qi stagnation
- Heart Fire
- Phlegm
- Phlegm/Fire



Qi/Blood deficiency of Heart (and Spleen)

Maya, Chow- Chow, f.s., 9 yrs

- Finicky appetite, loose stools, lazy, sleepy in the morning, sleeping well at night
- Generalized arthrosis and IVDD
- Worsening anxiety, fearfulness and phobias
- Tongue: swollen, wet, pale(?)
- Pulse: Deep and weak, almost hidden

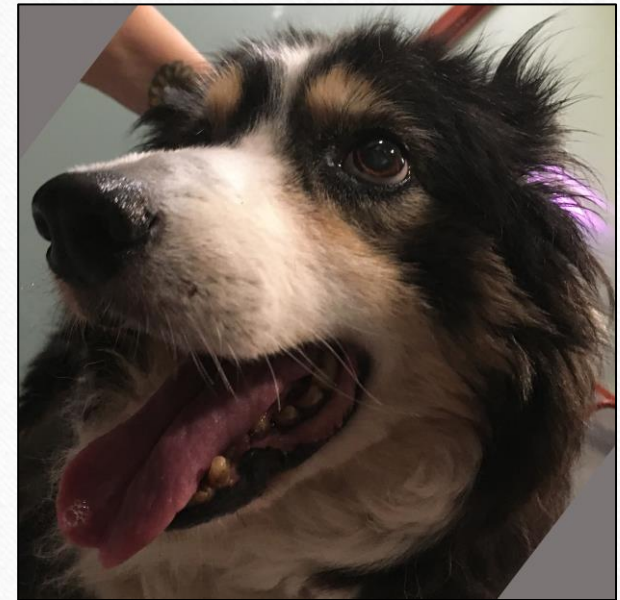


- Earth/Water
- Jing and Kd xu, Sp xu, Ht xu
- T. Kd and Jing: BL 52
- T. Sp: BL25, BL20, 21, CV12/ ST36 LI10
- T. Ht and Shen: BL44/ HT7,KD4/(KD4, HT5)
- T. Blood: ST36, SP6

Heart Yin deficiency (and Lv Yin, empty Heat)

Wendy, Border Collie, f.s., 15 yrs

- Anxious and hyperprotective, thunderstorm and fireworks fobia, restless at night
- Generalized arthrosis and IVDD
- Hepatopathy, cardiomyopathy, TIA
- Tongue: red, heart-shaped
- Pulse: thin and weak

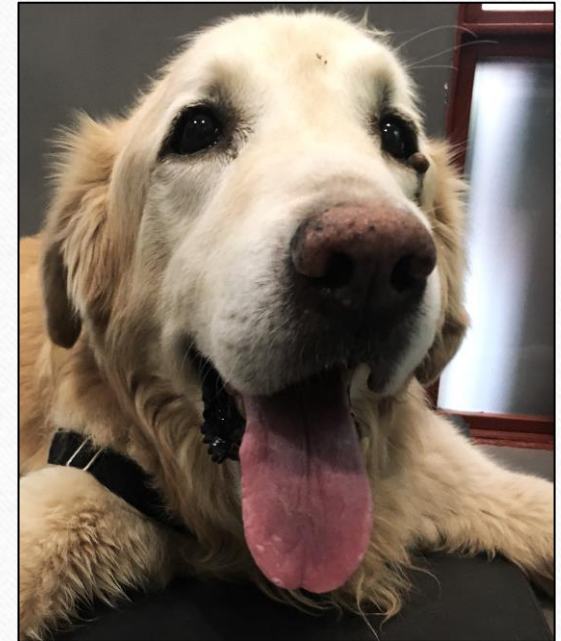


- Wood
- Kd Yin xu, Lv Yin xu, Ht Yin xu
- T. Kd Yin, Qi and Jing: BL 52, SP6/ BL 23, KD3
- T. Lv Yin: BL18,19, SP6/LV13, PC6 (stagn)
- T. Ht Yin and Shen: BL44, SP6/ HT7, KD4
- Aquapuncture: SP6 HT7
- Phlegm: PC5, LV3

Heart Blood deficiency (w/ Lv Blood def.)

Skipper, G. Retriever X, m., 13,5 yrs.

- Anxious, reactive, panting more at night
- Deambulatory tetraparesis
- Liver enzymes raised
- Thin, pale pink tongue with pale edges and tip
- Deep and weak pulse very thin and rough left s.

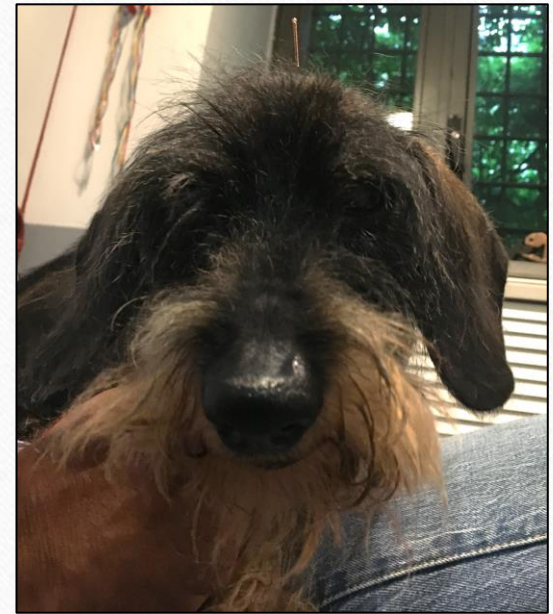


- Wood
- Heart and Liver Blood deficiency
- T. Heart and Liver Yin and Blood: SP6, ST36, HT7/
BL 17, BL18
- Aquapuncture: SP6, HT7, *An mien*

Heart Yang deficiency

Ciro, Dachsund, m, 17 yrs

- Apathic, not interactive, apparently deaf, easily startling, sometimes restless
- Generalized arthrosis
- Slight chronic nephropaty
- Swollen, wet tongue with thick coating on the back
- Very deep and weak, slow pulse

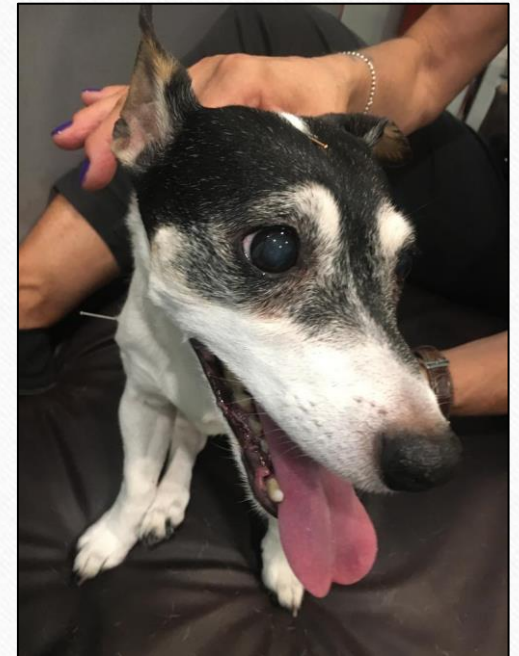


- Earth
- Kd Qi and Yang deficiency, Heart Yang deficiency
- T Kd Qi and Yang: GV4, BL52, Moxa
- T Ht Yang: BL15, BL44
- Raise pure Yang to the head: BL10, GV20 t

Liver Qi stagnation (w/ Lv Yang Rising)

Mafalda, Jack Russel, f.s., 14 yrs

- Sudden appearance of episodes of anxiety/panic, reluctance to being touched, conjunctivitis
- Soon after diagnosed liver mass
- In the past suffered of epilepsy, cured with AP
- Purple, swollen tongue, Ht tip
- Wiry pulses



- Wood/Water
- Lv Qi stagnation, Heart Yin deficiency
- Move Lv Qi: LV3, PC6/LV3, LI4
- Settle the Shen for panicking: KD4, HT7
- T Ht Yang: BL15, BL44
- D. Damp: ST40, PC5

Heart Fire

Kira, mixed breed, fs, 16yrs

- Sleepless at night, anxious, barking day and night, restless, nervous
- IVDD
- Lifelong dermatitis
- Fast, Forceful, Big pulse
- Swollen red tongue with little coating



- Wood
- Heart Fire blazing upwards with Liver Qi stagnation
- Drain Fire: HT8, PC8, LV2
- Move Lv Qi: LV3, PC6/GB34, TH6
- Tonify underlying deficiencies: SP6, KD3
- Aquapuncture: SP6, LI11/ HT7, KD3/An mien

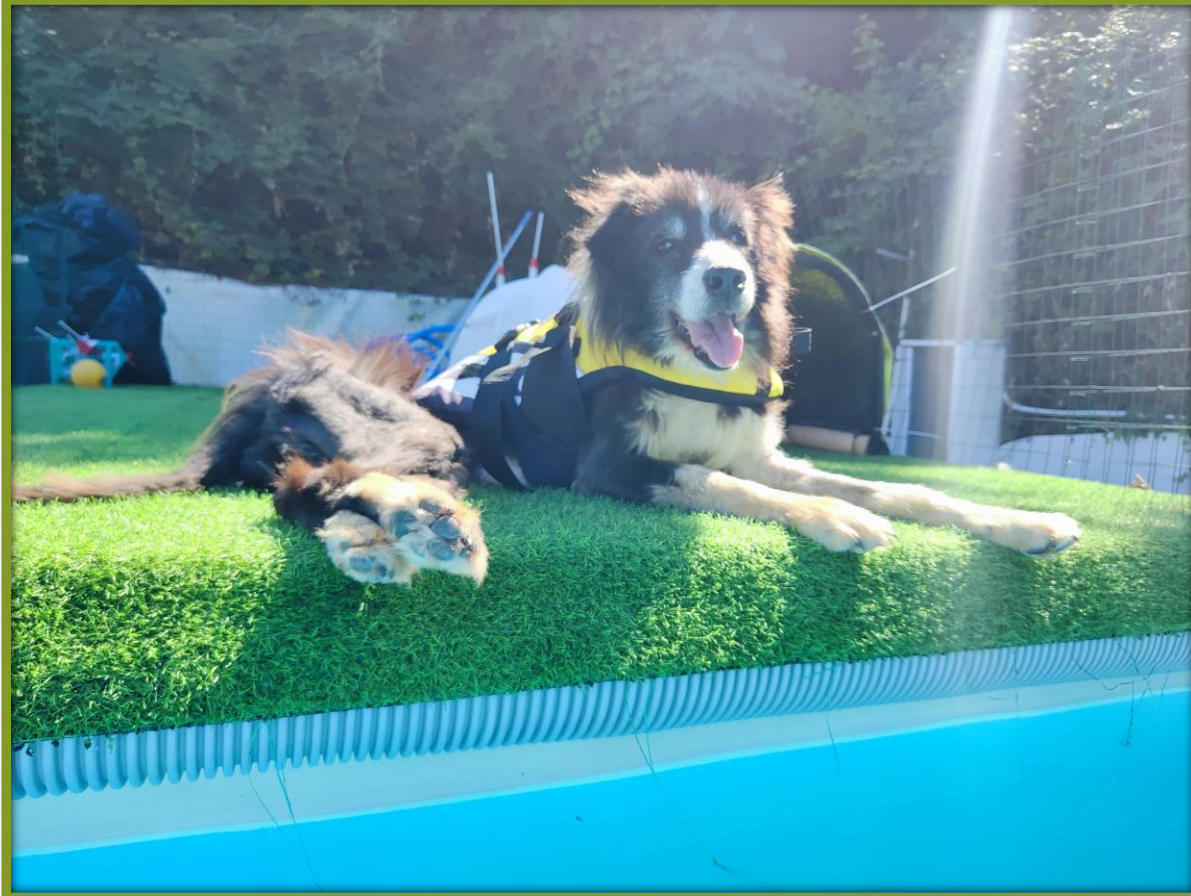
Phlegm

Jordan, Border Collie, mc, 18yrs

- Absent, disoriented, apathic, not interacting, few episodes of circling
- Cervical IVDD, mostly blind, apparently deaf
- Raised liver enzymes
- Swollen purple tongue
- Slippery and wiry pulses



- Metal/Wood
- Phlegm obstructing orifices with Liver Qi stagnation
- Dispel Phlegm: ST40, PC5, BL10
- Move Lv Qi: LV3, LI4/LV3, PC6/GB34, TH6
- Tonify underlying deficiencies: BL17, BL18/ST36, SP6



Phlegm (with deficient Heat)

Piccolina, Springer Spaniel, fs, 14?yrs

- Hyperkinesia, circling, anxiety and panting worst at night, not interactive
- Cervical IVDD
- Slight liver and renal failure
- Red/purple, large, heart shaped tongue
- Wiry and forceful but deep pulses



- Fire/Wood
- Phlegm, Heart Yin def, with slight Liver Qi stagnation
- Dispel Phlegm ST40, PC5, BL10
- Nourish Ht Yin and settle the Shen: HT6, KD6/HT7, KD3 or SP6
- Move Lv Qi and pacify the Liver: LV3, PC6/GV20d.
- Aquapuncture: Anmien, then SP6, HT7

Phlegm/Fire

Fidel, mixed breed, mc, 15,5yrs

- Barking day and night, hyperkinesia, hyperdreamism, moments of absence and disorientation
- Chronic kidney failure, liver mass
- Allergies and loose stools all his life
- Purple, swollen, shiny, tongue
- Wiry, slippery, forceful, fast pulses



- Fire
- Phlegm obstructing orifices, Fire disturbing the Shen, Liver Qi stagnation
- Dispel Phlegm: ST40, PC5, ST8, BL10
- Drain Fire: HT8, LV2
- Move Lv Qi and settle Hun: BL47, LV3, PC6
- Aquapuncture: HT7, *An- Mien*, GB13, GV24, SP6.
- Tonifying underlying deficiency: BL17, BL18

Wu Zi: The 5 Branches

- Lifestyle
- Food therapy
- Massage
- Phytotherapy
- Acupuncture



Lifestyle

Cognitive enrichment:

- Regular walks
- Regular introduction to new toys
- Human and other pet interaction
- Pet rehab facilities



Food therapy

- Home made diet
- Heart and Yin nourishing foods
- Bitter foods to clear heat
- Ketogenic diet
- Diet with sufficient amount of MTC



Foods Likely to Prevent or Treat AD in People

High intake of plant-based foods
Antioxidants
Probiotics
Soy beans
Omega-3-polyunsaturated fatty acids
Whole grains
Fruits/vegetables/nuts
Medium-chain triglyceride-rich foods
Fish

Foods Likely to Increase Risk of AD in People

Red meat or poultry
Refined sugar
Processed food
High-fat dairy products

Phytotherapy

- Heavy substance to anchor the Shen
*Ostrea Mu li, Draconis Long gui, Polygonum
Ye Jiao Teng, Succinum Hu Po, Cinnabaris Zhu Sha*
- Light herbs to pacify the Shen
*Ziziphus Suan Zao Ren, Biota Bai Zi Ren,
Polygala Yuan Zhi, Poria Fu Shen*



Ginkgo biloba (Bai Guo) Antioxidant; antiapoptotic; antiinflammatory

Huperzia serrata (Qian Ceng Ta) Procholinergic; antiglutamate (NMDA antagonism)

Curcuma longa (Yu Jin) Inhibits A β production; antioxidant; antiinflammatory

Ginseng (Ren Shen) Antioxidant; antiglutamate (NMDA antagonism); decrease A β

Coptis chinensis (Huang Lian) Inhibits A β production; procholinergic; antioxidant; antiinflammatory

Polygala tenuifolia (Yuan Zhi) Inhibits A β production; antiapoptotic

Salvia miltiorrhiza (Dan Shen) Inhibits A β aggregation; antioxidant; antiinflammatory

Angelica sinensis (Dang Gui) Antioxidant; antiinflammatory

Crocus sativus (Zang Hong Hua) Antioxidant; antiapoptotic

Gastrodia elata (Tian Ma) Procholinergic; antioxidant

Rehmannia glutinosa (Shu Di Huang) Procholinergic; antioxidant

Epimedium (Yin Yang Huo) Antioxidant; antiapoptotic

Magnolia officinalis (Xin Yi Hua) Procholinergic; antioxidant

Scutellaria baicalensis (Huang Qin) Inhibits A β aggregation; antioxidant; antiinflammatory; antiapoptotic

Camellia sinensis (Cha Hua) Reduces A β levels; antioxidant; antiinflammatory; antiapoptotic

Herbal formulas:

- Liu Wei Di Huang Wan (*Rehmannia 6*)
- Sai Luo Tong (*Panax ginseng, Ginkgo biloba, Crocus sativa*)
- Fu Fang Dan Shen (*Salvia miltiorrhiza, Notoginseng, Borneolum*)
- Ba Wei Di Huang Wan (*Rehmannia 8*)
- Yi Gan San (most advanced cases)

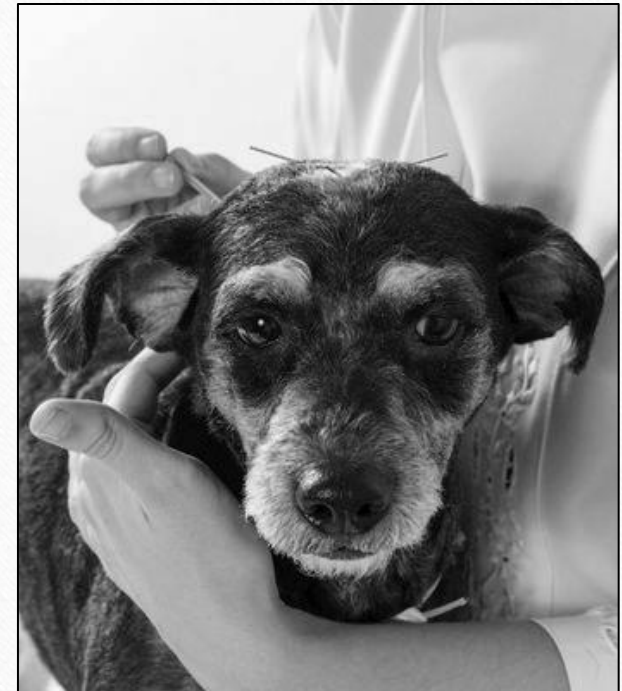
Massage

- Tui- Na
- Shiatsu
- Craniosacral therapy



Acupuncture

- Enhanced neuronal glucose use
- Decreased accumulation of $A\beta$ in the brain
- Increased production of neurotrophic factors
- Proliferation of neuronal stem cells
- Protection or recovery from synaptic loss and dendritic atrophy in the hippocampus



- HT-7 PC-6: promotion of cholinergic neural transmission
- GV-14, GV-20, CV-6, CV-12, CV-17, SP-10, ST-36, HT-9, KID-1, LU-11, PC-9, GB-34, LIV-3: suppression of oxidative stress and attenuation of apoptosis
- GB-34, GV-20, LIV-3, SP-10, ST-36: reduction of the expression of microglia
- LI-4 with LIV-3: activation of regions of the cerebrum responsible for memory and cognition. MRI showing increased connectivity in most of the hippocampal-related regions

Points Categories

- Shen Points
- Window of the Sky points
- Gui Points
- Ling Points
- Extraordinary Channels



Shen Points

Shen Points of the head (acting on Big Shen)

- GV24, *Shen Ting*
- GB13, *Ben Shen*

Shen points of the chest (acting on small Shen)

- KD23, *Shen Feng*
- BL44, *Shen Tang*

More Shen Points:

- HT7 *Shenmen*, GV11 *Shendao*,
Sishencong (M-HN-1)

More points acting on Shen:

- PC6, PC7, CV14, *Anmien* (M-HN-54),
BL15, *GV20*, *Yintang* (M-HN-3)

Phlegm:

- ST40, PC5, ST8



Window of the Sky

- Ren Ying ST9: *“When Yang is rebellious and there is counter-flow, there is pain in the head. The chest is full and one is unable to take breath normally; treat Man's Receptor.”*
- Fu Tu LI18: *When there is an abrupt loss of speech, the qi hardens; treat Supporting Chimney.*
- Tian You TH16: *“When there is an abrupt loss of hearing, the qi becomes covered and blocked, and the ears and eyes lose their brightness; treat Celestial Pillar.”*
- Tian Zhu BL10: *“When there are spasms, convulsions, and dizziness, and the feet are unable to bear the body; treat Wind Pillar.”*
- Tian Fu LU3: *“An abrupt thirst and fever, the interior is rebellious and in counter-flow, causing the liver and lungs to strike at each other. And blood overflows from the nose and mouth; treat Celestial Mansion.”*

Gui Points

- GV 26 Gui Gong, LU 11 Gui Xin, SP 1 Gui Lei
- PC 7 Gui Xin, BL 62 Gui Lu, GV 16 Gui Zhen
- ST 6 Gui Chuang, CV 24 Gui Shi, PC 8 Gui Ku
- GV 23 Gui Tang, CV 1 Gui Zang, LI 11 Gui Chen, EP Gui Feng

Ling Points

- HT2: Helps Qi and Blood circulation.
- HT4: Heals «madness», anxiety, calms the Shen
- KD24: Calms the Shen and helps with emotional difficulty in breathing
- GB18: Obsessive thoughts
- GV10: Treats rebellious Yang

Extraordinary Channels

- Lakes and dams for Jing
- Du Mai to nourish the brain
- Chong Mai for Ben Tun Qi and Li Jing
- Qiao Mai for sleep disturbances

Final considerations

- Although dogs with CCD are typically recognized as showing cognitive impairment by 8 years or older, there is considerable evidence that the processes leading to this clinical state begin earlier in life. Pet owners and veterinarians should therefore consider preventive measures against the development of CCD when dogs are middle aged.
- Because CCD-suspect dogs tend to be elderly, other disease processes that could mimic CCD need to be ruled out.

- Recent literature in rodent AD models and human clinical AD trials suggests an important role for Chinese herbal therapy and acupuncture in the treatment and prevention of cognitive dysfunction.
- Studies demonstrated that sufficiently stimulated brains undergo to degeneration more slowly and later. That is why the most important thing is never stop interacting with our dogs. When physical activity is not possible, mental activation games and exercises are to be performed daily. Because our dogs live through us, through the love and attention we give them everyday.



*“It takes a long ageing
to become so sweet”*

Thank you!