## SENILE DEMENTIA

# **Experience in Treatment According** to Differentiation of Patterns

#### by Xu Jiezhong

enile dementia is a term which covers a group of chronic and progressively declining symptoms of various organs and tissues with unknown aetiology. It is mainly characterised by lowering of intelligence and changes in personality and behaviour. Typical manifestations include memory disturbance, inability to think abstractly, impaired judgement and loss of social skills. There is as yet no special therapeutic method for treating this disease. According to clinical experience, and based on differentiation of patterns, this disease may be classified into two types: deficiency and excess. The excess pattern is mainly caused by preponderance of phlegm and stasis of blood, and the deficiency pattern is due mainly to pathological changes of the Liver, Spleen and Kidney. Many cases seen in the clinic are characterised by deficiency complicated with excess, and it is necessary to differentiate which is the principal pattern.

## Dysfunction of the Orifices due to Turbid Phlegm

In senile patients, dysfunction of the Sanjiao due to decline of the Lung, Spleen and Kidney leads to accumulation of water-damp which then transforms into phlegm. When the phlegm mists the orifices, there may be consequent disturbance in the visual, auditory and speech functions, as well as poor memory and related disorders. When the phlegm disturbs the channels and collaterals, there may be limited movement of the limbs, tremor and hemiplegia. Phlegm may be either cold or hot in character. The treatment principle for cold phlegm is to warm and dry phlegm, and for phlegm-heat, to purify and resolve phlegm.

#### 1. Stagnation of turbid phlegm

Clinical manifestations

- dull appearance
- dementia
- slow response
- poor memory
- muttering to oneself
- stuffy chest
- loss of appetite

- excessive sticky salivation
- pale tongue with a white and sticky coating
- soft and slippery pulse

*Principle of treatment:* Clear the orifices by resolving phlegm. *Treatment* 

Ban Xia (Rhizoma Pinelliae Ternatae)

Chen Pi (Pericarpium Citri Reticulatae)

Fu Ling (Sclerotium Poriae Cocos)

Gan Cao (Radix Glycyrrhizae Uralensis)

Cang Zhu (Rhizoma Atractylodis)

Shi Chang Pu (Rhizoma Acori Graminei)

Bai Jie Zi (Semen Sinapis Albae)

Zhi Nan Xing (Rhizoma Arisaematis)

- if there is headache and vertigo, add Tian Ma (Rhizoma Gastrodiae Elatae) and Gou Teng (Ramulus Uncariae Cum Uncis) to soothe the Liver and dispel wind.
- if there is numbness and tremor of the limbs, add Quan Xie (Buthus Martensi), Wu Gong (Scolopendra Subspinipes) and Jiang Can (Bombyx Batryticatus) to dispel wind and stop convulsion.
- if there is hemiplegia, add Tao Ren (Semen Persicae), Hong Hua (Flos Carthami Tinctorii), Di Long (Lumbricus) and Chi Shao (Radix Paeoniae Rubrae) to remove obstruction from the channels.

#### Case 1

Mr. Yi, aged 72, first visited on 3 June 1988, suffering from progressive dementia for 3 years with such manifestations as failing memory, paranoia, dull responses, impaired speech, staggering gait, poor appetite, loose stools, excessive salivation, tremor of the hands, and inability to look after himself. His tongue was pale with a white, sticky coating and toothmarks on the border; his pulse was thready and slippery.

Diagnosis: Accumulation of phlegm due to weakness of the Spleen and Stomach.

*Principle of treatment:* strengthen the Spleen, regulate the Stomach, resolve phlegm and turbidity.

Prescription

Ban Xia (Rhizoma Pinelliae Ternatae) 9g

Fu Ling (Sclerotium Poriae Cocos) 9g

Cang Zhu (Rhizoma Atractylodis) 9g Shi Chang Pu (Rhizoma Acori Graminei) 9g Yu Jin (Tuber Curcumae) 9g Jiang Can (Bombyx Batryticatus) 9g Chen Pi (Pericarpium Citri Reticulatae) 6g Zhi Nan Xing (Rhizoma Arisaematis) 6g Yi Yi Ren (Semen Coicis Lachryma-jobi) 15g Zhi Gan Cao (Radix Glycyrrhizae Praeparatae) 3g

After ten doses of the above prescription, his appetite improved, he had less salivation, his speech was clear and he could answer questions correctly. After another twelve doses the involuntary flow of saliva and tremor of the hands had stopped, and he could basically look after himself. His tongue was pale with a thin white coating and toothmarks on the border; the pulse was thready and weak. Treatment was continued with administration of *Liu Jun Zi Tang* (Six Gentleman Decoction) for 6 months, after which the patient could look after himself completely. At follow-up 2 years later no recurrence was found.

[Ingredients of *Liu Jun Zi Tang*: Dang Shen (Radix Codonopsis Pilosulae), Fu Ling (Sclerotium Poriae Cocos), Bai Zhu (Rhizoma Atractylodis Macrocephalae), Gan Cao (Radix Glycyrrhizae Uralensis), Chen Pi (Pericarpium Citri Reticulatae) and Ban Xia (Rhizoma Pinelliae Ternatae).]

#### 2. Upward disturbance of phlegm-heat

Clinical manifestations

- dementia
- stubborn behaviour
- irritability
- red face and eyes
- poor memory
- insomnia
- excessive flow of saliva
- red tongue with yellow, sticky coating
- wiry, slippery and rapid pulse

*Principle of treatment*: clear heat from the Heart and resolve phlegm.

Treatment

Wen Dan Tang (Warm the Gall Bladder Decoction) plus: Huang Lian (Rhizoma Coptidis)

Shi Chang Pu (Rhizoma Acori Graminei)

Yu Jin (Tuber Curcumae)

Meng Shi (Lapis Chlorite)

Yuan Zhi (Radix Polygalae Tenuifoliae).

[Ingredients of *Wen Dan Tang*: Zhu Ru (Caulis Bambusae in Taeniis), Zhi Shi (Fructus Citri seu Ponciri Immaturus), Ban Xia (Rhizoma Pinelliae Ternatae), Chen Pi (Pericarpium Citri Reticulatae), Fu Ling (Sclerotium Poriae Cocos), Gan Cao (Radix Glycyrrhizae Uralensis) and Sheng Jiang (Rhizoma Zingiberis Officinalis Recens)].

- if there is headache and vertigo, add Shi Jue Ming (Concha Haliotidis), Ju Hua (Flos Chrysanthemi Morifolii) and Gou Teng (Ramulus Uncariae Cum Uncis) to clear heat and dispel wind.
- if there is constipation, add Sheng Da Huang (Rhizoma

Rhei) to clear heat and loosen the bowels.

#### Case 2

Mr. Tai, aged 68, first visited on 7 April 1989, having suffered from hypertension for 20 years, which led to personality changes, paranoia, irritability, insomnia so severe as to cause him to spend entirely sleepless nights, poor memory, anorexia, constipation, yellow urine, flushed face, incoherent speech, foul breath, a red tongue with a thick yellow coating and a wiry and slippery pulse.

*Diagnosis:* Stagnation of phlegm-heat which rises and disturbs the mind.

*Principle of treatment:* clear heat, resolve phlegm and calm the mind.

Prescription

Huang Lian (Rhizoma Coptidis) 6g

Zhi Zi (Fructus Gardeniae Jasminoidis) 6g

Chen Pi (Pericarpium Citri Reticulatae) 6g

Zhi Shi (Fructus Citri seu Ponciri Immaturus) 6g

Ban Xia (Rhizoma Pinelliae Ternatae) 9g

Fu Ling (Sclerotium Poriae Cocos) 9g

Shi Chang Pu (Rhizoma Acori Graminei) 9g

Yu Jin (Tuber Curcumae) 9g

Sheng Da Huang (Rhizoma Rhei) 9g

Zhu Sha (Cinnabaris) (add to the decoction at the end) 1.5g

Mu Li (Concha Ostreae) (to be cooked first) 30g

Long Chi (Dens Draconis) (to be cooked first) 15g

Zhi Gan Cao (Radix Glycyrrhizae Praeparatae) 3g

After 12 doses the patient's sleep became normal, his bowels were regular and he was able to respond to and answer questions correctly. His breath was less foul, and the yellow tongue coating was reduced. After another 8 doses of the same prescription with Zhu Sha (Cinnabaris), Zhi Zi (Fructus Gardeniae Jasminoidis) and Da Huang (Rhizoma Rhei) omitted, the patient was calm, his memory was improved and his speech clear, although his responses were still slow. His tongue was red, with a white and sticky coating, and his pulse wiry and thready.

Treatment continued with the application of modified *Jin Shui Liu Jun Jian* (Six Gentleman of Metal and Water Decoction).

### Obstruction of Channels and Collaterals due to Stagnation of Blood

Blood is the material base for mental activities. In senile patients the functions of the Heart, Liver and Spleen decline. Deficiency of Heart qi causes failure in normal blood circulation. Dysfunction of the Liver in maintaining the free flow of qi causes failure of the Liver to store blood normally. Dysfunction of the Spleen causes abnormal transportation and transformation and blood extravasation. All these may lead to slowing of blood circulation and blood stasis, blocking the channels and collaterals and depriving the brain of nourishment. Li Shizhen said "The brain is the abode of the mind." Wang An stated "Memory relies on the functioning of the brain." Wang Qingren said "Poor memory in the

elderly is caused by deficiency of brain marrow". Obstruction of the channels and collaterals deprives the brain of nourishment, giving rise to dysfunction in vision, audition, olfaction, speech and memory, plus abnormal emotional activities. When blood stagnation blocks the channels and collaterals, there will be numbness of the limbs, tremor and atrophy.

Clinical manifestations

- dementia
- stereotypy (persistent, inappropriate, mechanical repetition of actions, body postures or speech patterns)
- insomnia
- poor memory
- headache
- vertigo
- deafness
- aphasia
- tremor
- hemiplegia
- dark tongue with possible stagnant spots
- hesitant pulse

Treatment

Tao Hong Si Wu Tang (Four Substance-Decoction with Safflower and Peach Pit). Ingredients: Tao Ren (Semen Persicae), Hong Hua (Flos Carthami Tinctorii), Shu Di Huang (Radix Rehmanniae Glutinosae Conquitae), Dang Gui (Radix Angelicae Sinensis), Bai Shao (Radix Paeoniae Lactiflorae) and Chuan Xiong (Radix Ligustici Wallichii).

- if there is irritability, add Huang Lian (Rhizoma Coptidis) and Zhi Zi (Fructus Gardeniae Jasminoidis) to clear fire from the Heart and Liver.
- if there is excessive salivation and a sticky tongue coating, add Zhi Nan Xing (Rhizoma Arisaematis), Bai Jie Zi (Semen Sinapis Albae) and Gua Lou (Fructus Trichosanthis) to resolve phlegm and remove obstruction from the channels.
- if there is shortness of breath and a dull spirit, add Huang Qi (Radix Astragali) and Ren Shen (Radix Ginseng) to tonify qi and remove obstruction from the channels.
- if there is general aversion to cold and cold limbs, add Fu Zi (Radix Aconiti Carmichaeli Praeparatae) and Rou Gui (Cortex Cinnamomi Cassiae) to warm the Kidney and tonify yang.

#### Case 3

Mr. Gu, aged 66, first visited on 12 January 1990. He had suffered a cerebral thrombosis two years previously, and had been treated by western medicine. He still had weak myodynamia of the right limbs. During the last six months he showed progressive mental deterioration, dulled responses, sluggish movement, headache, poor memory, irritability, dysphasia, insomnia, sleepiness during the day and restlessness at night, constipation, a dark red tongue with a thin and white coating, and wiry and thready pulse. The western medicine diagnosis made by CT scan was multiple cerebral infarction.

Diagnosis: Obstruction of collaterals due to stagnation of qi

and blood.

*Principle of treatment:* activate blood circulation, disperse stagnation, remove obstruction from the collaterals and clear the mind.

Prescription

Tao Ren (Semen Persicae) 10g

Hong Hua (Flos Carthami Tinctorii) 10g

Chi Shao (Radix Paeoniae Rubrae) 10g

Sheng Di Huang (Radix Rehmanniae Glutinosae) 10g

Dang Gui Wei (Radix Angelicae Sinensis) 10g

Yu Jin (Tuber Curcumae) 10g

Chuan Xiong (Radix Ligustici Wallichii) 5g

Zhi Da Huang (Rhizoma Rhei Praeparata) ) 5g

Chai Hu (Radix Bupleuri) 3g

Zhi Gan Cao (Radix Glycyrrhizae Praeparatae) 3g

She Xiang (Secretio Moschus moschiferi) (to be swallowed separately) 0.15g

After nine doses the headache was gone and sleep at night was more peaceful. His bowels and urination became normal. Treatment was then continued with the removal of Chai Hu (Radix Bupleuri), Zhi Da Huang (Rhizoma Rhei Praeparata) and She Xiang (Secretio Moschus moschiferi), and the addition of Ji Xue Teng (Radix et Caulis Jixueteng) 15g and Dan Shen (Radix Salviae Miltiorrhizae) 15g to the above prescription. After some twenty doses, the patient's emotional state was stabilised, his memory recovered and speech improved, and he could answer questions correctly. His responses were still slightly slow, but he was able to visit the doctor independently.

## Malnourishment of the Sea of Marrow due to Deficiency of the Liver and Kidney

The Liver stores blood and the Kidney stores essence, these functions being mutually promoting. Deficiency of the Liver and Kidney leads to deficiency of the essence and blood which deprive the marrow of nourishment and cause emptiness of the collaterals, giving rise to dementia, poor memory, abnormal mental activities, tremor, paralysis and atrophy.

Clinical manifestations

- dementia
- poor memory
- insomnia
- irritability
- suspiciousness
- tinnitus and deafness
- blurred vision
- weakness of the lumbar region and spine
- tremor
- paralysis
- red tongue with little saliva
- thready and rapid pulse

*Principle of treatment:* nourish and tonify the Liver and Kidney.

Treatment

Modified Zuo Gui Wan (Restore the Left Kidney Pill).

Ingredients:

Shu Di Huang (Radix Rehmanniae Glutinosae Conquitae) Shan Yao (Radix Dioscoreae Oppositae)

Gou Qi Zi (Fructus Lycii Chinensis)

Shan Zhu Yu (Fructus Corni Officinalis)

Chuan Niu Xi (Radix Cyathulae)

Tu Si Zi (Semen Cuscutae)

Lu Jiao Jiao (Colla Cornu Cervi)

Gui Jiao (Colla Plastrum Testudinis).

- if there is headache and vertigo, add Long Gu (Os Draconis), Mu Li (Concha Ostreae), Shi Jue Ming (Concha Haliotidis) and Ju Hua (Flos Chrysanthemi Morifolii) to soothe the Liver yang.
- if there is blurred vision, add Nu Zhen Zi (Fructus Ligustri Lucidi), Chu Shi Zi (Fructus Broussonetiae) and Cao Jue Ming (Semen Cassiae Torae) to nourish yin and brighten the eyes.
- if there is pain and paralysis of the limbs, add Ji Xue Teng (Radix et Caulis Jixueteng), Dan Shen (Radix Salviae Miltiorrhizae), Si Gua Luo (Fasciculus Vascularis Luffae) and Lu Lu Tong (Fructus Liquidambaris Taiwanianae) to activate blood circulation and remove obstruction from the collaterals.

#### Case 4

Mr. Mei, aged 62, first visited on 10, September 1989. He had been retired for a year and had become irritable, stubborn, slow in his responses, and had poor memory, headache, vertigo and tinnitus. He imagined he had such incurable diseases as myocardial infarction and liver cancer which negative ECG and ultrasonic wave examinations could not dispel. He had a flushed face, a red tongue with little salivation, and a wiry and thready pulse.

*Diagnosis:* Deficiency of yin of the Liver and Kidney, and hyperactivity of deficient yang.

*Principle of treatment:* tonify the Liver and Kidney, nourish yin and soothe yang.

Prescription

Shu Di Huang (Radix Rehmanniae Glutinosae Conquitae) 25g

Gui Ban (Plastrum Testudinis) (cook first) 25g

Shi Jue Ming (Concha Haliotidis) (cook first) 25g

Zhen Zhu Mu (Margarita) (cook first) 25g

Gou Qi Zi (Fructus Lycii Chinensis) 15g

Shan Zhu Yu (Fructus Corni Officinalis) 15g

Bai Shao (Radix Paeoniae Lactiflorae) 15g

Shan Yao (Radix Dioscoreae Oppositae) 10g

Mai Men Dong (Tuber Ophiopogonis Japonici) 10g

Bai Ji Li (Fructus Tribuli Terrestris)

Mu Dan Pi (Cortex Moutan Radicis) 10g

After 15 doses the headache and vertigo were alleviated and his sleep more peaceful. Shi Jue Ming (Concha Haliotidis) and Zhen Zhu Mu (Margarita) were removed from the prescription, and Tu Si Zi (Semen Cuscutae) 10g and Lu Jiao Jiao (Colla Cornu Cervi) 10g (to be melted and added to the decoction) were added. After another 25 doses the patient's emotions became stable and his memory im-

proved. His daughter reported that he had been able to go on a journey with former colleagues.

#### Deficiency of Yang of the Spleen and Kidney Depriving the Brain Marrow of Nourishment

The Spleen is the acquired base and the Kidney the congenital base. Either congenital deficiency or dissipation may lead to deficiency of the Spleen and Kidney, while prolonged deficiency will lead to decline of yang qi. Deficiency of Spleen yang causes impaired digestion and deficiency of the source for production of qi and blood. Deficiency of Kidney gives rise to dysfunction of the Kidney in storing essence. As a result, deficiency of qi, blood, yin and essence gives rise to emptiness of the sea of marrow, dysfunction of the orifices, decline in intelligence, abnormal mental activities, and even paralysis and mental disorders.

Clinical manifestations

- dementia
- dull spirit
- taciturnity or aphasia
- poor appetite
- loose stools
- aversion to cold, cold limbs
- incontinence of stools and urine
- paralysis
- tinnitus
- deafness
- pale tongue with a white coating
- deep and weak pulse.

Treatment should be given to warm and tonify the Spleen and Kidney by using *Gui Fu Li Zhong Tang* (Cinnamon and Prepared Aconite Decoction to Regulate the Middle) or modified *Jin Gui Shen Qi Wan* (Kidney Qi Pill from the Golden Cabinet).

Ingredients of Gui Fu Li Zhong Tang:

Rou Gui (Cortex Cinnamomi Cassiae)

Fu Zi (Radix Aconiti Carmichaeli Praeparatae)

Gan Jiang (Rhizoma Zingiberis Officinalis)

Ren Shen (Radix Ginseng)

Bai Zhu (Rhizoma Atractylodis Macrocephalae)

Zhi Gan Cao (Radix Glycyrrhizae Praeparatae).

Ingredients of *Jin Gui Shen Qi Wan*:

Sheng Di Huang (Radix Rehmanniae Glutinosae)

Shan Zhu Yu (Fructus Corni Officinalis)

Shan Yao (Radix Dioscoreae Oppositae)

Fu Zi (Radix Aconiti Carmichaeli Praeparatae)

Gui Zhi (Ramulus Cinnamomi Cassiae)

Ze Xie (Rhizoma Alismatis Plantago-aquaticae)

Fu Ling (Sclerotium Poriae Cocos)

Mu Dan Pi (Cortex Moutan Radicis).

- in case of excessive flow of sticky salivation accompanied by a white and sticky tongue coating, add Bai Jie Zi (Semen Sinapis Albae), Gua Lou (Fructus Trichosanthis) and Tian Nan Xing (Rhizoma Arisaematis) to eliminate damp and resolve phlegm.
- if there is oedema of the limbs, add Fu Ling (Sclerotium

Poriae Cocos), Che Qian Zi (Semen Plantaginis) and Ze Xie (Rhizoma Alismatis Plantago-aquaticae) to promote diuresis and eliminate oedema.

- in case of pain and paralysis of the limbs, a dark purple tongue with possible stagnant spots and a hesitant pulse, add Tao Ren (Semen Persicae), Hong Hua (Flos Carthami Tinctorii) and Ji Xue Teng (Radix et Caulis Jixueteng) to activate blood circulation and remove obstruction in the channels.
- for aphasia and coma, it is advisable to use the prescription *Huang Yin Zi* with modification to nourish yin, tonify yang, resolve phlegm and clear the mind.

#### Case 5

Mr. Lin, aged 79, first visited on 28, April 1988. His wife had died 3 years previously and since then he had suffered from mental depression which led to dementia, later accompanied by taciturnity, inactivity, poor appetite, loose stools, deafness, low spirits, aversion to cold, cold limbs, excessive salivation, incontinence of urine, oedema of the lower limbs, a pale and flabby tongue with a white and sticky tongue coating, and a deep and slow pulse.

*Diagnosis:* water retention due to deficiency of yang of the Spleen and Kidney.

*Principle of treatment:* warm and nourish the Spleen and Kidney, strengthen yang and promote diuresis.

Prescription:

Shu Fu Pian (Radix Aconiti Carmichaeli Praeparata) 10g Gan Jiang (Rhizoma Zingiberis Officinalis) 10g

Chao Bai Zhu (Stir-fried Rhizoma Atractylodis Macrocephalae) l0g

Ren Shen (Radix Ginseng) (cook first) 3g

Rou Gui (Cortex Cinnamomi Cassiae) (add later) 3g

Yi Yi Ren (Semen Coicis Lachryma-jobi) 15g

Fu Ling (Sclerotium Poriae Cocos) 15g

Ban Xia (Rhizoma Pinelliae Ternatae) 6g

Cang Zhu (Rhizoma Atractylodis) 6g

Zhi Gan Cao (Radix Glycyrrhizae Praeparatae) 5g

After 9 doses the oedema of the lower limbs was reduced, his appetite was improved and the stool better formed. After taking the medicine for some 40 days the excessive salivation was reduced, his bowel movements and urination became normal and his limbs were warm. After treatment with *Jin Gui Shen Qi Wan* plus *Si Jun Zi Tang* for more than one year the patient could look after himself and do simple housework.

This article first appeared in the Journal of Traditional Chinese Medicine. Xu Jiezhong works at Dangyang People's Hospital, Hubei Province.