

## THE TREATMENT OF CHILDREN

This newsletter is the first of a cycle dedicated to the discussion of the four ages of our life, i.e. childhood, adolescence, adulthood and old age. These newsletters will discuss the aetiology and pathology of the problems relevant to each stage and the appropriate remedies from the Three Treasures and Women's Treasure ranges.

### CHILDREN'S CHARACTERISTICS

Children's physiology and pathology have peculiar characteristics that set them apart from adults. It is essential to understand the main physiological and pathological differences between children and adults to diagnose and treat paediatric problems effectively. Traditionally, the main features of children's physiology and pathology have been the following.

#### **The Spleen is Often Deficient**

The digestive system at birth is immature and the Stomach and Spleen are weak and vulnerable. Our first few months and years of life are dominated by the state of the digestive system: the younger the child, the more this statement is valid. This means that very many of children's problems are simply due to a weak digestive system and an immature Stomach and Spleen: we can all see this very clearly in babies whose whole life revolves around feeding, struggling to digest the milk, burping and regurgitating. As the child grows, the digestive system becomes stronger and digestive problems should be less and less frequent under normal circumstances; however, in very many cases, due to incorrect feeding, the digestive system remains weak and this will continue to cause problems as the child grows, especially lack of appetite, retention of food and abdominal pain.

#### **Yin is Often Deficient**

This statement that Yin is often deficient applies only in the context of febrile diseases. Children are very prone to fevers and these have a tendency to injure Yin much more quickly than in adults. Injury of Yin during a febrile disease is always potentially dangerous because such injury may lead to malnourishment of the sinews and the development of internal Wind which causes convulsions. However, it is also true to say that children's Yin can recover quickly after injury from fever and return to normal in a matter of days.

#### **The Zangfu Are "Soft" (Vulnerable)**

Children's internal organs are still immature and therefore more vulnerable to acute diseases. The Lungs and Stomach in particular are good examples of the validity of this statement. Children's Lungs are very vulnerable to invasions of Wind, hence the frequent sore throats, fevers, ear infections that they suffer from.

#### **Qi is Easily Deviated From Its Pathways**

This is an important aspect of children's pathology. In the course of an acute disease, the normal flow of Qi is very easily disrupted in children: this is the reason why vomiting is such a common symptom in children. The invasion of a pathogenic factor easily disrupts the proper ascending and descending of Qi, especially in the Stomach and Spleen, so that Stomach-Qi cannot descend causing vomiting, and Spleen-Qi cannot ascend causing diarrhoea.

#### **Children Fall Ill Easily And Recover Easily**

Because their internal organs are vulnerable, children fall ill easily, especially from external

invasions of Wind or from digestive upsets. However, by the same token, children recover easily because their internal organs are "fresh" or "clear and spirited" as the classics say. The ability of children to recover quickly is frequently seen in practice when a child may be quite ill from an acute invasion of Wind and then be as bright as a button only a few hours later.

### **The Zangfu Are "Clear And Spirited" And They Recover Easily**

Children's internal organs are described in the old books as being "clear and spirited". Children's internal organs have these characteristics also because they are unencumbered by chronic pathogenic factors which often afflict adults, e.g. Phlegm, Qi stagnation, Blood stasis and Dampness. For this reason, children recover easily from most diseases as described above: it also means that generally a course of treatment will be much shorter in children than in adults.

### **The Liver is Often Diseased**

This statement applies to acute rather than chronic diseases. In acute invasions of Wind-Heat, the Heat may become internal and easily injure Liver-Yin: this leads to malnourishment of the sinews and often the development of Liver-Wind and therefore convulsions. Convulsions are seen as a Liver symptom as Liver-Wind "agitates" the sinews and leads to the tremor of convulsions.

## CONSTITUTIONAL TYPES

### **Spleen**

Flaccid muscles alongside the spine, digestive problems, vomiting, diarrhoea, sallow complexion; a child that is quiet and may be thin or, if the child has Phlegm, fat when new-born, getting thinner after one month.

### **Lungs**

White complexion, whooping cough, asthma-eczema, thin chest, "special LU pulse", Lung crack on tongue; a child that is fearful, shy, prone to colds.

### **Heart**

Bluish tinge on forehead, fearful, restless sleep, crying at night, Heart crack on tongue, body hot, red eyes, red cheeks (or the opposite, i.e. cold hands, pale complexion), red tip of the tongue: a child that is tense.

### **Liver**

Myopia from early age, headaches from early age, sinewy body, Wiry pulse, enuresis (from Liver-Fire), restless sleep, twitching in sleep, screaming in sleep, hungry: a child that is very tense.

### **Kidneys**

Nocturnal enuresis, without energy, lassitude, no drive, thin body, asthma-eczema, headaches from early age, frequent urination, feeling cold; a child that may be developing slowly.

## **Patient Remedies**

**Spleen** Soothe the Centre

**Lungs** Herbal Sentinel - Yang, Herbal Sentinel - Yin, Children's Herbal Sentinel

**Heart** Calm the Spirit

**Liver** Drain Fire (to drain Liver)

Nourish the Root (to nourish Liver-Yin)

**Kidneys** Nourish the Root

A different classification of children's constitutional types is as follows:

**Dry, Hot, Thin**

Thin body, dry skin, withered hair, dry mouth and nose, red, swollen throat, mouth or tongue ulcers, thirst, night-sweating, hot palms, often gets abscesses or carbuncles, four limbs contracted, scanty urine, dry stools, red tongue, yellow coating or not enough coating.

Should have sweet-cool foods and herbs. Sugar-cane juice is good.

**Empty-cold, Thin, Weak**

Thin body, thin limbs, cold hands and feet, dull-pale complexion, feeling cold, vomiting, diarrhoea, abdominal pain, pale urine, loose stools, crying easily, lazy, sweating easily, breathlessness, pale tongue, deep and fine pulse.

Should have warm and sweet foods and herbs.

**Greasy, Fat, Sluggish**

Fat body, swelling under the eyes, distended abdomen, greasy skin, skin spots, swollen face, poor digestion, loose stools, tongue pale and swollen, slippery pulse.

Should have warm, drying foods and herbs.

**Oedema, Dark**

Oedema of body or face, dark under eyes, dark-withered skin, withered hair, weak muscles and tendons, slow speech, mental retardation, incontinence of urine, tongue red and swollen with yellow-sticky coating, fine pulse.

Must tonify and invigorate Blood, benefit the Kidneys and support Yang.

**Weary, Wasting, Slack, Soft**

Thin body, weak limbs, no strength, yellow-sallow complexion, no strength in neck, flaccid muscles, weariness, slow speech, eyes without shen, feeling cold, loose stools, crying, abdominal distension.

**AETIOLOGY OF CHILDREN'S PROBLEMS**

The aetiology of children's problems is relatively simple as it is dominated by two main aetiological factors: invasions of external pathogenic factors and diet. Other aetiological factors include emotional problems (which usually are not of the child's own making but derive from parent's problems) and immunizations.

**External Pathogenic Factors**

Invasion of external pathogenic factors (and especially Wind) is a major aetiological factor in children. Young babies do not usually succumb to external pathogenic factors if they have been breast-fed. Toddlers suffer very frequent invasions of external Wind when they start mixing with other children in play-group and at play-school.

In children, an exterior invasion of Wind usually takes the form of Wind-Heat rather than Wind-Cold: in fact, Wind-Cold is quite rare in children and the younger the child, the rarer it is. For this reason, when in doubt, it is always better to expel Wind-Heat rather than Wind-Cold when a child suffers an invasion of Wind.

## **Diet**

Children's digestive system and Spleen are weak by definition. This weakness, however, is aggravated by various factors such as weaning too early, giving children food that is too difficult to digest, overfeeding, and feeding too frequently. All these factors aggravate the weakness of the digestive system and usually lead to retention of food (called Accumulation Disorder in children) in the short term and to a combination of retention of food and Spleen deficiency in the long run.

## **Emotional Problems**

Dr J.H.F. Shen always used to say that "children do not suffer from emotional problems". By that, he really meant that children tend to suffer from the emotional problems affecting their parents rather than from their own emotional problems. Children are very sensitive to the emotional stress surrounding them and suffer emotional strain as a result.

However, Western children are different from Chinese children and sadly they increasingly do suffer from emotional problems themselves. Apart from difficult family situations, their emotional problems are often due to excessive pressure at school and excessive parents' expectations. This causes usually stagnation of Liver-Qi and frequently abdominal pain. Interestingly, Chinese paediatrics books do not even consider Liver-Qi stagnation as a cause of abdominal pain, though in my opinion it is the most frequent cause of abdominal pain in children over 7.

## **Immunizations**

A discussion of the effect of immunizations from the Chinese perspective is beyond the scope of this newsletter. To understand the effect of immunizations from a Chinese perspective, it is necessary to refer to the theory of the 4 Levels from the Wen Bing school. According to this theory, Wind-Heat penetrates the body passing through four energetic layers (the "4 Levels"), i.e. the Wei, Qi, Ying and Blood levels. The Wei level is the only exterior one, i.e. Wind-Heat is lodged in the Lung's Wei system in the skin and muscles; the Qi, Ying and Blood levels are all internal and all characterized by interior Heat. However, the brilliance of this theory rests in its differentiation between three energetic layers of Heat, Qi being the most superficial and Blood being the deepest (and most serious). A pathogenic factor normally penetrates the four levels in the above order: in the majority of cases, in fact, the pathogenic factor usually progresses only to the Qi level after which it is either expelled or it gives rise to a residual pathogenic factor.

From this perspective, immunizations basically consist in injecting a pathogenic factor (albeit an attenuated or dead pathogen) directly at the Blood level: although this does stimulate the production of antibodies to that particular disease, it does so in an unnatural way as the normal immune response is much more complex than the simple production of antibodies.

From a Chinese perspective, the natural immune response needs to involve the Wei level, a stage that is bypassed when immunizations are given. The effect of immunizations is to create Latent Heat at the Blood level which may cause all sorts of problems later in the short and long term, e.g. asthma, eczema, chronic cough, chronic infections, etc. In a few cases, the effects are much more serious causing convulsions or brain damage.

## **Television**

Watching too much television has a deleterious effect on children's health from many points of view:

- it overstimulates the mind and under-exercises the body
- it strains the eyes
- it exposes children to electromagnetic radiation

- it affects the Shen by overstimulating the mind artificially and often by scaring children (as with a child who watches a horror movie in its parents' absence).

### **Heredity**

Heredity plays an important role in some children's diseases such as asthma and eczema. The constitutional types have been outlined above. Causes of hereditary problems are primarily four:

- 1 weak constitution of parents
- 2 parents in poor health or too old at the time of conception
- 3 events affecting the mother during pregnancy
- 4 events affecting the baby during delivery

The first factor cannot be influenced. As for the second factor, the ancient Chinese doctors placed great emphasis on the health of the parents at the time of conception. Events affecting the mother during pregnancy which can affect the constitution of the baby include shocks, emotional traumas, smoking, drinking alcohol, consuming too many hot-spicy foods. Factors concerning childbirth that can affect the baby's constitution include premature birth, induced birth, a long birth, and premature cutting of the umbilical cord.

## **PATHOLOGY OF CHILDREN'S PROBLEMS**

### **Accumulation Disorder**

Accumulation Disorder in children is equivalent to Retention of Food in adults: it simply consists in an accumulation of food in the Middle Burner usually due to improper feeding or eating. In infants, Accumulation Disorder manifests with regurgitation of milk; in older children, with poor appetite, nausea, vomiting and epigastric or abdominal pain. The obstruction in the Middle Burner affects the Stomach and Spleen and eventually leads to Spleen-Qi deficiency. Thus, Accumulation Disorder may be of the Full type characterized purely by accumulation of food, or of the mixed Full/Empty type when it is associated with Spleen deficiency.

Accumulation Disorder is very common in young children, so much so that when I treat a child I nearly always add a digestive herb to whatever prescription I am using. Examples of digestive herbs are Shan Zha, Shen Qu, Ji Nei Jin, Gu Ya and Mai Ya.

### **Residual Pathogenic Factor**

Residual pathogenic factor is an extremely common pathology in children: it is probably no exaggeration to say that at least 50% of children's problems seen in our clinics are due to a residual pathogenic factor.

A residual pathogenic factor develops during an invasion of Wind, usually at the Qi level. When a child suffers an invasion of Wind, there are two possible outcomes: either the Wind is expelled at the Wei level and the child recovers completely, or the pathogenic factor progresses to the Qi level and becomes internal (usually in the form of Heat, Phlegm-Heat or Damp-Heat). After this progression, there are two possible outcomes: either the pathogenic factor is cleared and the child recovers without any residual effect, or the child appears to recover but there is left-over Heat, Phlegm-Heat or Damp-Heat, all of which are examples of residual pathogenic factors.

Why does a residual pathogenic factor develop? In children, this is due to three possible factors: a weak constitution, improper feeding or eating during the acute illness, or improper use of antibiotics. Antibiotics are the most common cause of residual pathogenic factor in children because, although they kill bacteria, they do not expel Wind, clear Heat or resolve

Phlegm or Dampness; moreover, they are not effective against viruses and, in spite of this, they are frequently (and improperly) used in viral infections. Thus if a child has an acute, febrile illness from a bacterial infection, the antibiotics will eliminate the fever by killing the bacteria, but the child may be left with Heat, Phlegm-Heat or Damp-Heat. The child appears to recover and goes back to school, but improper feeding often continues and the residual pathogenic factor will predispose the child to a further infection. The child falls ill again with a fever, more antibiotics are administered and the residual pathogenic factor is only strengthened: thus, a vicious circle is installed and the child becomes chronically unwell.

A residual pathogenic factor may manifest with any of the following conditions:

- Chronic cough
- Chronic ear infections
- Chronic sinusitis
- Chronic tonsillitis
- Chronic lymphatic congestion
- Recurrent mouth ulcers
- Chronic diarrhoea
- Insomnia
- Hyperactivity

Apart from the above symptoms and signs, the tongue and the pulse may also show the presence of a residual pathogenic factor. When there is Lung-Heat, the tongue may be red on the front; if there is Lung Phlegm-Heat, it may have a thin-yellow coating in the area between the tip and the centre. In the presence of Heat, the pulse may be slightly rapid and if there is also Phlegm or Dampness it may be slippery.

The main patterns appearing as residual pathogenic factors are as follows:

### **Lung-Heat**

Irritability, dry cough, slight thirst, restless sleep, red cheeks or only the right cheek red, "floating" red on white complexion, tongue red in front part.

### **Lung Phlegm-Heat**

Cough with sputum, tightness or feeling of oppression of the chest, irritability, restless sleep, catarrh, slight wheezing, thin-yellow tongue coating in Lung area, pulse Slippery.

### **Spleen Damp-Heat**

Nausea, vomiting, diarrhoea, epigastric pain/fullness, smelly stools, bad breath, lassitude, night-sweating, pulse Slippery, sticky-yellow tongue coating.

### **Damp-Heat in Head**

Sinusitis, blocked nose or constantly runny nose, swollen adenoids, prone to ear infections, irritability, restless sleep, dull frontal headache, catarrh, swollen glands in neck, prone to colds, sticky-yellow tongue coating.

### **Lesser Yang Pattern**

Chills and fever, feeling hot and cold in alternation, earache, irritability, restless sleep, pulse Wiry.

## REMEDIES

The Three Treasures remedies for children can therefore be classified as follows:

### **For external invasions**

Expel Wind-Cold  
Expel Wind-Heat

**For digestive problems**

Break into a Smile  
Central Mansion  
Children's Herbal Sentinel  
Drain Fields  
Ease the Muscles  
Release Constraint  
Soothe the Centre

**For residual pathogenic factors**

Clear the Soul  
Drain Fields  
Ease the Muscles  
Tonify Qi and Ease the Muscles  
Welcome Fragrance

**To calm the Mind**

Calm the Spirit  
Drain Fire  
Release Constraint

**BREAK INTO A SMILE**

This remedy is suitable to treat abdominal pain from stagnation of Qi in children which, as mentioned above, may sadly derive from emotional stress. This emotional stress may be due to painful family situations (parents quarrelling, conflicts with siblings or, more seriously, abuse) or to pressure at school. The latter is common in bright children who are "pushed" by over-ambitious parents to do well at school.

Typically, this abdominal pain occurs in bouts usually coinciding with periods of stress in the family or at school: it may resemble the pain from appendicitis.

**CALM THE SPIRIT**

This remedy, which nourishes Spleen and Heart, is suitable for nervous children with a weak Heart constitution. Such a child would probably be nervous and fearful and would suffer from nocturnal enuresis, poor sleep and crying at night.

**CENTRAL MANSION**

This is suitable for children with a hereditary deficiency of Stomach- and Spleen-Qi and Stomach- and Spleen-Yin, and Dampness. I say "hereditary" because, in young children, this is unlikely to be caused by dietary irregularities: in fact, in adults these patterns are caused by irregular eating, eating late at night, eating on the run, eating standing up, business lunches, skipping meals, etc. The tongue appearance is the most important sign leading one to prescribe this remedy: it will be slightly pale, often with a Stomach crack in the centre, peeled in places and with a rootless coating. Often, there are no symptoms.

**CHILDREN'S HERBAL SENTINEL**

This is of course specific for children and its use is described in detail in the Three Treasures manual. I would only like to stress the link between invasions of external pathogenic factors and the digestive system in children (such a link is made in the manual) with a case history. A mother recently reported that she gave her child Children's Herbal Sentinel every time he suffered from an invasion of Wind: although this is not a use for which it was formulated, it worked every time!

## **CLEAR LUSTRE**

This can be used for eczema in children.

## **CLEAR QI**

This can be used for asthma in children: it treats the Biao (Manifestation), i.e. it makes Lung-Qi descend. It is therefore used to treat the Manifestation in allergic asthma when the attacks are fairly frequent (daily). If the attacks are infrequent, this remedy can be combined with Herbal Sentinel to treat the Ben (Root) simultaneously.

## **CLEAR THE SOUL**

This can be used for acute chest infections in children following an invasion of Wind, i.e. when the pathogenic factor is Phlegm-Heat at the Qi level. It can be used also for residual pathogenic factor with Phlegm-Heat when the child suffers from a chronic cough with catarrh and some breathlessness. The tongue has a sticky-yellow coating.

## **DRAIN FIELDS**

This can be used to resolve chronic Dampness in children, especially Dampness in the Middle and Upper Burner. For example, it may be combined with Welcome Fragrance to resolve Dampness in the sinuses. DRAIN FIRE This can be used to drain Liver-Fire in children. Liver-Fire does occur in nervous and highly strung children and may cause headaches, digestive problems, sinus problems and nocturnal enuresis. Please pay attention to the distinction between Heat and Fire in the manual on page 63 before using this remedy. It may help ADD (if there is Liver-Fire).

Note that this remedy is a variation of Long Dan Xie Gan Wan and it does not contain Mu Tong.

## **EASE THE MUSCLES**

This remedy is suitable to clear residual Damp-Heat in children. The causes and symptoms of residual pathogenic factors have been described above. The residual Damp-Heat in children may cause chronic tiredness, ear infections, sore throats, etc.

## **EXPEL WIND-COLD**

This is of course suitable to expel Wind-Cold in children with symptoms of chilliness (aversion to cold), fever, runny nose, sneezing. However, children suffer from invasions of Wind-Heat more frequently than of Wind-Cold. The older the child, the more likely he/she is to suffer from invasions of Wind-Cold.

## **EXPEL WIND-HEAT**

Invasions of Wind-Heat are very common in children: besides the usual symptoms of aversion to cold, fever, thirst, sore throat, etc., these may also cause tonsillitis and ear infections. Invasions of Wind-Heat nearly always cause the appearance of red points on a child's tongue: these will be distributed on the front and sides. The number of red points is closely related to the intensity of the pathogenic factor: the more intense the Wind-Heat, the more red points there are.

Expel Wind-Heat should be a stand-by remedy in any household with children.

## **HERBAL SENTINEL (YIN or YANG)**

This remedy is suitable for children suffering from allergic asthma or rhinitis to treat the Ben (Root). It can be given either throughout the Fall and Winter or only during the Fall.

## **JADE SCREEN**

This remedy treats the Biao in allergic rhinitis (in the same way as Clear Qi does for allergic asthma): it is therefore given on its own only during the hay fever season in allergic rhinitis or, combined with Herbal Sentinel, throughout the year in perennial rhinitis.

## **LIMPID SEA**

This remedy can be given to children suffering from chronic mucus in the chest causing a chronic cough (this is often a residual pathogenic factor).

## **RELEASE CONSTRAINT**

This can be given to nervous, stressed and highly strung children suffering from Liver-Qi stagnation and with a wiry pulse. It may help ADD (if there is Liver-Qi stagnation and the pulse is wiry). It may also help abdominal pain from Liver-Qi stagnation.

## **SOOTHE THE CENTRE**

This remedy may be given to children suffering from Stomach- and Spleen-Qi deficiency and Dampness causing digestive symptoms, and also for Accumulation Disorder of the Deficiency type.

## **TONIFY QI AND EASE THE MUSCLES**

This can be given to children suffering from chronic tiredness from Qi deficiency and residual Dampness, something that usually occurs only in older children approaching adolescence.

## **WELCOME FRAGRANCE**

This is suitable for children suffering from chronic sinusitis. Also for residual pathogenic factor with Dampness in the sinuses.

## **DOSAGE IN CHILDREN**

Children need lower doses than adults. Babies under 1 month old should not be treated at all and it is preferable not to treat babies under 6 months of age unless absolutely imperative. Children up to 6 years old should have a third of a dose; children between 6 and 14, half a dose; over 14, a full dose may be given. With drugs, the dosage for children is now adjusted according to body surface rather than body weight. The average body-surface area of a 70-Kg human is about 1.8m<sup>2</sup>. Thus, to calculate the dose for a child, the child's surface area is multiplied by the adult dose and divided by 1.8, giving the following table:

Age	Kg	Height in cm	Body surface in m <sup>2</sup>	Percentage of adult dose
Newborn	3.4	20	0.23	12.5%
1 month	4.2	55	0.26	14.5%
3 months	5.6	59	0.32	18%
6 months	7.7	67	0.4	22%
1 year	10	76	0.47	25%
3 years	14	94	0.62	33%
5 years	18	108	0.73	40%
7 years	23	120	0.88	50%

12 years	37	148	1.25	75%
Adult	70	173	1.8	100%

The values of this table can be followed when prescribing herbal remedies too, although precision is less important with such remedies than with drugs.