



Treatment of the Three Stages of Sinew Damage Employing External Applications by Andrew Ellis

In Chinese medicine the term used to describe injury to soft tissue (ligaments, tendons, etc.) as a result of sprains, strains or contusions is sinew damage (jin shang). This is distinct from bone fractures, dislocations, cuts and lacerations or those injuries that result in internal damage to the head, chest or abdomen. Treatment for sinew damage combines massage, acupuncture, external application of herbs, internal ingestion of herbs and exercise therapy. This publication centers on the use of external applications.

For the purposes of external application of herbs in the treatment of sinew damage, each injury is first classified in stages. First-stage is defined as the period during which swelling, pain and rubor are prominent; this usually lasts 4-7 days but can be 2-3 days in light cases. The second-stage of sinew damage is that period during which swelling and pain still exist but in a much less severe form; this stage lasts up to three weeks. The third-stage of sinew damage is defined as the period beginning three weeks to one month after the initial insult when swelling and rubor have disappeared and visible signs of stasis are minimal. Often a persistent aching and stiffness remains as the only symptom.

Successful treatment of trauma requires an understanding of its pathology. After initial trauma the local blood vessels dilate, blood flow to the region increases and fluids are exuded into the inflammatory focus. The result is the swelling, rubor and pain associated with inflammation. The principal of treatment at this point is to move blood, clear heat, dissipate swelling and relieve pain. Acupuncture and application of soft plasters or liniments form the basis of treatment. Soaks, steams and compresses are avoided because they aggravate inflammation by dilating blood vessels and encouraging hyperemia.

After a few days the circulatory system begins to clear away damaged tissues and swelling and pain decrease. At this point the local area begins to turn deep-red and purple indicating stasis of blood and qi. The treatment principle at this juncture is to soothe the sinews, dissipate stasis and quicken blood. Massage (above and below the traumatized location), liniments, steams, soaks, acupuncture and soft plasters are primary treatment.

When pain and swelling have subsided and what remains is the nagging pain of an enduring injury or pain that is exacerbated by damp or cold, the principle of treatment is to move qi, quicken collaterals, disperse cold, dispel damp, dissipate stasis and relax sinews. Acupuncture and moxabustion are useful in treatment of this stage of traumatic damage as are massage (including the traumatized location and employing massage salves or liniments), steams, soaks, hot compresses and the application of hard plasters.

I. First-stage sinew damage

- **Ma's Wu Shu Soft Plaster (#1) SW120** is a good general application to relieve the pain and swelling of first-stage sinew damage.
- If pain is prominent, apply **Stasis-Dissipating, Pain-Relieving Soft Plaster (#2) SW121**.
- If swelling is prominent, apply **Dissipation Soft Plaster (#3) SW122**.
- If rubor and heat are prominent, apply **Double-cooling Soft Plaster (#4) SW123**.
- The above soft plasters can be combined to meet presenting symptoms.

II. Second-stage sinew damage

Soft Plasters

- Apply **Tri-color Application (#5) SW124** if there are symptoms of cold or damp.
- **Blood-Quickening Soft Plaster (#6) SW125** is especially appropriate if swelling and pain are prominent, and heat and rubor are not.
- If swelling is minimal but pain and aching persists, apply **Sinew-Soothing Application (#7) SW126**.

Soak-Compresses

Ma's Post-trauma Soak-Compress (#8) SW114, Pain-relieving Soak-Compress (#9) SW115 and **Stasis-dissipating Soak-Compress (#10) SW116** are three steam-soaks that are good for second-stage sinew damage. The first is a combination of the two latter formulae and is the best general formula. As the names suggests **Pain-relieving Soak-Compress (#9) SW115** is appropriate if pain is severe, and **Stasis-dissipating Soak-Compress (#10) SW116** is suitable for post-trauma blood stasis (especially blood-stasis joint pain).

III. Third-stage sinew damage

Soak-Compresses

The following soak-compresses are appropriate for treatment of either third-stage sinew damage or old injuries. They can also be used to treat patients who have just had their cast removed and suffer from stiffness and aching.

- **Eight Immortals Hardness-Dissipating Decoction (#11) SW117** can dissipate hard knots and relieve the aching and tightness that accompanies enduring or third-stage sinew damage. It is balanced in nature so it can treat wind-damp bi that is either hot or cold.
- **Joint Injury Soak-Compress (#12) SW118** is warming. It moves qi and blood, dispels wind and is especially effective for treatment of joint pain.
- **Sinew-Penetrating Soak-Compress (#13) SW119** is a general formula for third stage trauma especially of the muscles and tendons. While **Joint Injury Soak-Compress (#12)** is particularly suited for joints, this formula is best for fleshy areas.

Hard Plasters

Application of hard plasters such as Gou Pi Gao are standard treatment for long-term or third-stage sinew damage.

IV. Other external applications for treatment of sinew damage

In addition to the above applications the following products can be rubbed into the affected area. Vigorous massage of the traumatized area is inappropriate if tendons or ligaments are severed or detached, or if there is any indication that this type of damage has occurred. These products however, may still be rubbed gently into the affected area.

- Massaging **Amber Massage Salve SW105 & SW106** into an affected area will relieve pain, quicken blood and dissipate swelling. It is appropriate for any disorder that benefits from massage.
- **Dr. Shir's Liniment SW109 & SW110** is unique in that it is designed to treat all stages of trauma. It is a balanced formula that relieves pain and swelling, quickens blood, dispels wind-damp and dissipates stasis. Liniments should be rubbed *very lightly*, in a circular motion, into the affected area. To achieve best results keep the spot moist with liniment as you rub for 20-30 minutes.

=====

Soft Plasters

Spread the soft plaster evenly on a gauze pad at a thickness of about one-eighth of an inch. Place the dressing on the affected area and secure with tape or a gauze bandage. Do not apply the dressing too tightly; it should maintain contact with the skin but not hinder circulation or cause pain. The efficacy of the soft plaster can be increased by crushing fresh herbs such as dandelion, hibiscus leaves or chrysanthemum leaves and mixing them into the soft plaster just prior to its application. Also, mixing a few drops of Dr. Shir's Liniment into the plaster before application will aid treatment.

© Copyright 1993, Andrew Ellis. All Rights Reserved

Consider placing a thin layer of gauze between the skin and the plaster to make removal of the plaster easier. Change the application once a day.

Steam-Soaks

Place an herb pack in four cups of water and bring to a boil. Lower the heat and simmer for 25 minutes. Immediately put the water (with herb bag still immersed) in an appropriately sized basin and hold the affected limb over the steaming liquid. When the decoction cools enough to allow the patient to bath the affected limb, the traumatized region should be totally immersed. Total soak-steam time should be 20-25 minutes. This procedure should be performed two times a day. Adding two tablespoons of rice wine to the water at the beginning of the process will enhance the effect of the steam-soak. The liquid can be re-heated and used for three to four days.

- For large areas or for multiple injuries the above doses can be doubled.
- The herb bags can be used as hot compresses at the end of the soaking process.

Steam-soaks as a Compress

Many areas, such as the shoulder, knee, hip and back, are difficult to soak. In such cases, cook an herb pack in two cups of water. Bring to a boil and simmer 25 minutes. Remove the bag and as soon as it cools enough to apply place it on the affected spot. Put a hot-pack or a hot water bottle over the compress to keep it hot and leave on for 20-25 minutes. Adding two tablespoons of rice wine to the water at the beginning of the process will enhance the effect.

It is important to cover the region that has been treated with the soak or compress. In most cases a soft plaster or plaster will be applied after a steam soak thus fulfilling this requirement. If however, no dressing is to be applied the patient must otherwise cover the traumatized region and protect it from wind and cold.

Contraindications and Cautions

Steam-soaks should not be used to treat areas that are still swollen. Care must be taken to avoid scalding. Ideally, the soak water or compress should be as hot as the patient can tolerate but not so hot that it burns the skin.

Discussion of Specific Formulae

Ma's Wu Shu Soft Plaster (#1) - SW120

Functions: Clear heat, dissipate swelling, quicken blood, move qi and relieve pain.

© Copyright 1993, Andrew Ellis. All Rights Reserved

This formula is well balanced. It dissipates swelling, moves blood and qi and clears heat. One fourth of ingredients clear heat and resolve toxin (huang bo, da huang and shi gao); one fourth clear heat and dissipate swelling (mang xiao, chi xiao dou, and shan zhi zi); and the remaining ingredients relieve pain, and move qi and blood.

Because, most of the ingredients in this soft plaster are cold or cool, it is an ideal one to apply to first-stage sinew damage where the foremost principle of treatment is to clear heat and resolve toxin.

Contraindications: This soft plaster should not be applied to open wounds. Avoid contact with eyes. This soft plaster will stain fabric.

Stasis-dissipating, Pain-Relieving Soft Plaster (#2) – SW121

Functions: Clear heat, relieve pain, dissipate swelling and stasis, and soothe sinews.

This formula employs da huang, and shan zhi zi as major constituents to clear heat, dissipate swelling and relieve pain. Bai zhi, ru xiang, and mo yao assist by dissipating stasis, moving qi and relieving pain. Mu gua soothes sinews and pu gong ying clears heat, resolves toxin and dissipates swelling.

The formula is an excellent one to use if pain is primary. It is employed in China to treat the first-stage of bone fractures, head injuries and sinew damage.

Contraindications: This soft plaster should not be applied to open wounds. Avoid contact with eyes. This soft plaster will stain fabric.

Dissipation Soft Plaster (#3) – SW122

Functions: Dissipates swelling, relieves pain, moves qi, and quickens blood.

As the name indicates this formula contains agents that dissipate swelling and move qi and blood. Since powerful dissipating agents are warm and pungent the formula includes huang bo to clear heat and resolve toxin. This current formula is a modification of zi jing pi san, which was first mentioned in a Ming dynasty treatise on external medicine.

This application can be used to treat the swelling and pain associated with first-stage sinew damage. Since it does not substantially clear heat, it must be combined with formula that clear heat such as **Double-cooling Soft Plaster (#4)**.

Contraindications: This soft plaster should not be applied to open wounds. Avoid contact with eyes. This soft plaster will stain fabric.

Double-cooling Soft Plaster (#4) – SW123

Functions: Clears heat, resolve toxin, dissipate swelling, and relieve pain.

Agents that clear heat and resolve toxin such as da huang, huang bo and shan zhi zi, form the core of this formula. The remaining agents dissipate swelling, relieve pain and course wind.

This formula treats sprains, strains and contusions that are warm to the touch and red in color.

Double-cooling Soft Plaster (#4) relieves pain and dissipates swelling, but these functions are secondary to its ability to clear heat. It can be combined with other soft plasters to supplement their ability to clear heat.

Contraindications: This soft plaster should not be applied to open wounds. Avoid contact with eyes. This soft plaster will stain fabric.

Tri-color Application (#5) - SW124

Functions: Dissipate swelling, relieve pain, move qi, repair sinew tears, disinhibit joints and dispel wind-damp bi.

Tri-color Application (#5) contains many agents that dispel damp and dissipate cold (wu jia pi, qiang huo, du huo, wei ling xian, fang feng, etc.). Bai zhi, ma qian zi and mu gua relieve pain and dang gui, niu xi and chuan xiong quicken blood. Zi jing pi dissipates swelling.

This soft plaster is especially useful in treating second and third stage sinew damage that present as cold-damp bi. It can be used to dissipate swelling and relieve pain in injuries that are one to three weeks old as long as the local area is not hot and red. This formula also can be used to treat tears in ligaments or tendons (as soon as rubor and calor have subsided).

Method of application: Some practitioners prefer to apply this ointment warm. To do this they gently warm the dressing over an alcohol burner before application. If this is done, care must be taken not to apply the soft plaster while it is too hot.

Contraindications: This soft plaster should not be applied to open wounds. Avoid contact with eyes or mucus membranes. This soft plaster will stain fabric. The soft plaster contains small amounts of ma qian zi, which is toxic if taken internally. Keep out of reach of children.

Blood-quickenning Powder (#6) – SW125

Functions: Dissipate swelling, relieve pain, soothe sinews, quicken connecting vessels and dispel stasis.

Agents such as rou gui, xiao hui xiang and cao wu make this formula hot and active. It contains powerful agents that relieve pain such as zi ran tong and mu gua and many blood moving agents to dissipate stasis (ru xiang, mo yao and xue jie for example).

This formula treats second-stage sinew damage or contusions that presents with swelling and pain.

Method of application: Some practitioners prefer to apply this ointment warm. To do this they gently warm the dressing over an alcohol burner before application. If this is done care must be taken not to apply the soft plaster while it is too hot.

Contraindications: This soft plaster should not be applied to open wounds. Avoid contact with eyes. This soft plaster will stain fabric.

Sinew-soothing Application (#7) - SW126

Functions: Relieve pain, quicken blood, dissipate swelling and stasis.

Blood-quicken and pain-relieving agents form the basis of this formula. Pu huang, su mu, hong hua, and chi shao quicken blood. Agents such as du huo and ban xia dispel damp and quicken the channels and tian nan xing and cao wu relieve pain. The formula contains shan zhi zi and da huang to counteract some of the warm herbs and to clear heat, dissipate swelling and relieve pain.

The balanced nature of this formula makes it a good one for treating second-stage sinew damage that is neither hot nor cold. It is most appropriate when stiffness and an aching, persistent pain are the main symptoms. The formula's strongest feature is its ability to relieve pain and move the qi and blood of the traumatized region.

Method of application: Some practitioners prefer to apply this ointment warm. To do this they gently warm the dressing over an alcohol burner before application. If this is done, care must be taken not to apply the soft plaster while it is too hot.

Contraindications: This soft plaster should not be applied to open wounds. Avoid contact with eyes. This soft plaster will stain fabric.

Ma's Post-trauma Soak-Compress (#8) - SW114

Functions: Move qi, resolve stasis, relieve pain, disinhibit joints and dispel cold and damp.

This formula is a modification of a combination of hai tong pi tang, and wu jia pi tang. Those decoctions concentrate on moving qi and blood, dispelling cold-damp and relieving pain. This modification is slightly warmer than either of its two components.

Ma's Post-trauma Soak-Compress (#8) is a good general treatment for all second-stage sinew damage as long as swelling has substantially decreased. In light cases this soak-compress can be used three days after insult, but in most cases it is best to wait five to seven days before employing a steam-soak. Use this soak-compress after swelling has dissipated and what remain are blood stasis, stiffness and limitations of joint movement.

Pain-relieving Soak-Compress (#9) – SW115

Functions: Move blood and qi, relieve pain, dispel damp, relieve itching, course wind and resolve stasis.

This formula is taken from *The Essentials of Bone-setting*, a Qing dynasty work about the treatment of traumatic injury. The formula's original name is hai tong pi tang. It is recommended in bone-setting texts for all kinds of traumatic injury including sinew damage and bone fractures where incessant pain is the primary symptom. The formula employs bai zhi, wei ling xian, mo yao, ru xiang, chuan xiong, tou gu cao and chuan jiao to move blood and qi and relieve pain. Fang feng dispels damp and courses wind and hong hua and dang gui move blood and resolve stasis. Dermatologists use a variation of this formula to treat itching.

Pain-relieving Soak-Compress (#9) is the steam-soak of choice for treatment of second-stage sinew damage in which pain is persistent.

Stasis-dissipating Soak-Compress (#10) – SW116

Functions: Resolve stasis, relieve pain, quicken blood and break blood.

Based on a formula taken from *The Essentials of Bone-setting*, this soak-compress contains agents that dissipate stasis, break blood and quicken blood. Chiefs among the herbs are san leng, fan mu bie, hong hua and su mu.

The blood stasis that is common in second-stage sinew damage (especially those resulting from contusions) is well treated with this soak-compress. This type of injury will present with deep purple bruises that are painful when palpated.

Eight Immortals Hardness-dissipating Decoction (#11) – SW117

Functions: Dissipate hard swelling, relieve pain, dispel wind and damp, clear heat, dry damp and move blood.

This formula is also drawn from the experience of bonesetters. *The Essentials of Bone-setting* recommends it for the treatment of hard, painful swellings that are the result of trauma. It is also used to treat wind-damp that is either hot or cold. In this formula fang feng and jing jie are warm herbs that dispel wind. Huang bo and ku shen clear heat and dry damp. Dang gui and mu dan pi are blood-moving agents that are warm and cool respectively. Gan cao and chuan jiao moderate pain and cang zhu dries damp.

As mentioned above this formula treats hard, painful swellings that are present in second or third-stage sinew damage and wind-damp patterns that are either hot or cold. Hard, painful swellings are differentiated from normal post-trauma swelling by their inherent hardness and reticence to dissipate.

Method of application: The addition of rice vinegar to the water in which this Soak-Compress is boiled will further help to relieve pain and dissipate swelling.

Joint Injury Soak-Compress (#12) - SW118

Functions: Quicken the connecting vessels, disinhibit the joints, move blood, relieve pain and

dispel wind and damp.

By including agents to dispel damp and wind, quicken blood and relieve pain this combination is especially able to move blood, quicken the connecting vessels and subsequently disinhibit joints. It includes such herbs as su mu, ru xiang, du huo, and shen jin cao.

This formula is recommended for the treatment of joint pain due to stasis of blood and qi. The stasis may be a result of trauma or owing to wind and damp obstructing the channels and connecting vessels. It is intended for use with enduring or third-stage sinew damage.

Sinew-penetrating Soak-Compress (#13) – SW119

Specifically designed to treat third-stage sinew damage and enduring soft tissue pain, the formula uses jing jie and fang feng to dispel wind and cold and course wind. Qiang huo, and du huo dispel damp and relieve pain and the remaining agents relieve pain, move qi and soothe sinew (hai tong pi, gui zhi, and chuan jiao for example).

This hot compress is used to treat general third-stage sinew damage and enduring soft tissue pain. As might be expected, if the patient's pain is worse with cold and relieved by heat and pressure, hot compresses are especially appropriate.

Additional Products

Amber Massage Salve – SW105 & SW106

Functions: Relieve pain, quicken blood, disperse stasis and dissipate swelling.

This formula is based on one that is commonly used in China. It is made with a sesame and beeswax base. It contains agents that move blood (xue jie, hong hua, ru xiang, mo yao, tao ren, and dang gui), relieve pain (hu po) and moisten the skin and clear heat (dang gui and zi cao gen). This salve can be applied wherever massage is appropriate. Because it moves blood it can be rubbed into bruises, strains or sprains and can also be used to relieve the pain and numbness of peripheral neuropathy. Amber Massage Salve is perfect for massaging into the skin of patients who have recently had a cast removed because it nourishes the skin, moves blood and dispels stasis.

Method of application: Apply a small amount to the fingers and massage into the traumatized area. Amber Massage Salve is especially effective following a steam-soak. The area that is worked should be covered afterwards to keep it warm and protect it from wind.

Dr. Shir's Liniment - SW109 & SW110

This liniment is unique in that it is designed to treat all stages of trauma. It is a balanced formula that relieves pain and swelling, quickens blood, dispels wind-damp and dissipates stasis.

Dr. Shir's Liniment is one that was given to Dr. Shi Neng-Yun through a lineage of teachers and is said to be from the famous Shao Lin Temple Monastery. This grain alcohol liniment contains da huang to clear heat and move blood; hong hua, ru xiang, mo yao, tao ren, jiang huang, and dang gui to dispel stasis and move blood and tian nan xing, and zhang nao to relieve pain, disperse accumulations, and dispel wind-damp.

Method of application: Liniment should be rubbed *very lightly*, in a circular motion, into the affected area. To achieve best results keep the spot moist with liniment as you rub for 20-30 minutes. When appropriate, liniments are especially effective following a steam-soak. The area that is worked should be covered afterwards to keep it warm and protect it from wind.

A NOTE ABOUT *SPRING WIND* SOFT PLASTERS

The base used for soft plasters is made of sesame oil, beeswax, arnebia, hong hua, tao ren, bai zhi, xue jie, ru xiang, mo yao, dang gui, and da huang.