Ingredients and Actions:

<table>
<thead>
<tr>
<th>Latin Name</th>
<th>Ingredient</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lycium</td>
<td>Gou Qi Zi</td>
<td>Nourish Liver Yin and Blood</td>
</tr>
<tr>
<td>Ligusticum</td>
<td>Chuan Xiong</td>
<td>Move Blood, resolve stagnation</td>
</tr>
<tr>
<td>Paeonia</td>
<td>Bai Shao Yao</td>
<td>Nourish Blood and Yin, soothe Liver Yang</td>
</tr>
<tr>
<td>Cornus</td>
<td>Shan Zhu Yu</td>
<td>Nourish Liver Yin</td>
</tr>
<tr>
<td>Acanthopanax</td>
<td>Wu Jia Pi</td>
<td>Strengthen ligaments and tendons</td>
</tr>
<tr>
<td>Achyranthes</td>
<td>Niu Xi</td>
<td>Strengthens the Kidney and benefit the knees</td>
</tr>
<tr>
<td>Rehmannia</td>
<td>Shu Di Huang</td>
<td>Nourish Blood and Yin</td>
</tr>
<tr>
<td>Psolera</td>
<td>Bu Gu Zhi</td>
<td>Nourish Kidney Yang and Yin</td>
</tr>
<tr>
<td>Epimedium</td>
<td>Yin Yang Huo</td>
<td>Nourish Kidney Yang and Yin</td>
</tr>
<tr>
<td>Angelica</td>
<td>Dang Gui</td>
<td>Nourish Blood</td>
</tr>
<tr>
<td>Morus</td>
<td>Sang Zhi</td>
<td>Smoothen limbs</td>
</tr>
<tr>
<td>Cinnamon</td>
<td>Gui Zhi</td>
<td>Activate the Channels and limbs</td>
</tr>
</tbody>
</table>

TCVM Thermal Nature:
- Slightly Warm

TCVM Indications:
- Liver Yin with Blood Deficiency
- Dry eyes
- Ligament mechanical damage
- Cracked hooves/paws
- Tongue: dry without coating
- Pulse: thready and weak

Chinese Principles of Treatment:
Nourish Liver Yin and Blood, strengthen tendons and ligaments

Contraindications: None

Dosage:
- Horse - 15 g twice daily as top dressing on feed
- Dog/Cat - 0.5 g per 10 to 20 lb body weight twice daily

200 teapills
100-0.2 g capsules
200-0.5 g capsules
600 g powder
900 g powder

Liver Yin with Blood Deficiency
- Dry eyes
- Ligament mechanical damage
- Cracked hooves/paws
- Tongue: dry without coating
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Drug Test Free Formula
Distributed through veterinarians only

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www.tcvmherbal.com
Main Herbs in Tendon/Ligament Formula

Tendon/Ligament Formula is a modification of the classical formula Bu Gan Qiang Jin San. Chinese herbal medicines have been used in treatment of martial arts injuries for centuries, and no conventional medicine or surgery has been developed that can heal tendons/ligaments. The tendons/ligaments are controlled by the Liver, and Liver Yin/Blood Deficiency is a common underlying cause of tendon and ligament injuries. Shu Di Huang (Rehmannia) nourishes Liver and Kidney Yin and Blood. It also replenishes Jing, and so is useful for tendon/ligament problems associated with developmental delay or premature aging. Dang Gui (Angelica) is commonly used in Chinese hospitals for treatment of musculoskeletal trauma, as it activates Blood circulation and disperses stagnation, relieving pain and dissipating swelling. Combination of Dang Gui (Angelica) with Chuan Xiong (Ligusticum) enhances the effects of both these herbs on promoting movement of Blood and dispersing stagnation, therefore relieving pain. Bai Shao (Paeonia) nourishes Blood and preserves Yin. It nourishes and softens the Liver, relieving pain.

Clinical Research on Tendon/Ligament Formula

Dang Gui (Angelica) has significant pain-relieving effects. Its anti-inflammatory effect is approximately 1.1 times stronger than acetylsalicylic acid (aspirin) and its pain-relieving effect is 1.7 times stronger. This anti-inflammatory effect is strong enough to protect mice from otherwise lethal experimentally-induced endotoxemia. Chuan Xiong (Ligusticum) has proven pain-relieving effects. For example, it has been used in humans to treat pain caused by hypertrophic myelitis and bone spurs on the heels. Within 5-10 days of topical application, pain was moderately to significantly reduced.

Pharmaceutical Evidence for the Effects of the Herbs in Tendon/Ligament Formula

Bai Shao (Paeonia) contains paeoniflorin, which is a significant anti-pyretic and anti-inflammatory, and also inhibits embolus formation through its influence on blood clotting. Ligustrazine, a compound isolated from Chuan Xiong (Ligusticum), has been shown to inhibit sensation of pain in rats, through its effects on various ion channels involved in neurotransmission. Chuan Xiong also contains lactone compounds that have significant anti-inflammatory effects. Wu Jia Pi (Acanthopanax) is adaptogenic, significantly increasing endurance in mice after administration for three days, and also has immunostimulant, anti-inflammatory, analgesic and anti-cancer effects. Shu Di Huang (Rehmannia) is also anti-inflammatory, through inhibition of the pro-inflammatory enzyme cyclooxygenase.

Tendon/Ligament Formula: A Case Study

A 12-year-old Poodle was successfully treated by Dr. Cydria Manette Schaefer for a torn cruciate ligament in the right stifle. He had started limping six days earlier, and was now non-weight bearing on the affected leg. The dog was a friendly Earth constitution, and had a history of previous medical problems, including seizures after vaccination and cataracts. His tongue was slightly lavender and his pulse was wiry. The dog was diagnosed with Qi-Blood Stagnation, together with Liver Blood/Yin Deficiency. He was treated by changing the diet in order to nourish Blood and Yin, and given four acupuncture treatments at monthly intervals. Tendon/Ligament Formula was prescribed for six months. After one month, the dog had started touching his leg to the ground, and after two months he was able to weight-bear. After four months, he was using the leg much more and the muscle tone of his leg had returned. At a ten-month follow-up, the dog was fully recovered and even able to stand up on his hind legs.

References:
4 Bie, B.H. et al, Ligustrazine inhibits high voltage-gated Ca(2+) and TTX-resistant Na(+) channels of primary sensory neuron and thermal nociception in the rat: a study on peripheral mechanism. Neurosci. Bull. 2006, 22:79-84
7 Schaefer, C.M. Acupuncture and herbal medicine treatment of cruciate tear in poodle. TCVM News. 2009, 8:7