Key words: acupotomy; knee osteoarthritis; chondrocyte; IL-1; TNF-a; MMP-3

Knee osteoarthritis is a degenerative and long-term injury lesions, the primary population is mainly concentrated in the elderly and long-term knee injuries of knee osteoarthritis in the crowd, often slow onset, obese women are more common, knee joint activities, weight-bearing pain significantly increased pain in the beginning is often the latter is paroxysmal, persistent pain, pain when walking on the stairs, down the stairs is particularly evident, even when walking claudication. Severe may also appear in the joints of the body and muscle disorders and inflammatory effusion.[2] It is characterized by joint swelling and pain, active friction, flexion and extension, and other activities, and chronic inflammation can lead to abnormal changes of joints. The articular cartilage degeneration is very obvious, the common cartilage degeneration and destruction is the main pathological features of the disease. [3]

At present, KOA has been used in the treatment of KOA, but the mechanism of acupotomy lysis is only limited to the macro level of biomechanics. However, in the observation of many clinical cases in the Acupotomy articular cartilage patients with KOA have been repaired in different degrees, so the treatment mechanism needs further discovery and in-depth research, this study is through the animal experiment to evaluate the acupotomy therapy on the solution of KOA in chondrocytes the molecular mechanism of action, in order to observe the Acupotomy operation of Knee Osteoarthritis Chondrocytes molecular mechanism, in order to analyze the pathological basis of acupuncture therapy in the treatment of knee osteoarthritis, clinical effect for validation of modern medicine theory foundation.

Objective This experiment adopts the Acupotomy operation model for treatment of knee osteoarthritis in rabbits, through observation of the response to treatment and a variety of rabbit knee osteoarthritis (KOA) changes of related molecules, evaluation of acupotomy operation treatment, the mechanism of acupuncture therapy and the corresponding inquiry theory.

Materials and methods The rabbits were randomly divided into 2 groups, each of which consisted of 2 rabbits and two male rabbits. There were 4 groups, and 32 rabbits were involved in the experiment. A model of osteoarthritis of the knee joint was selected in healthy rabbits. The methods of intervention were acupotomy and electroacupuncture.

Results and discussion This experiment adopts the Acupotomy operation in the treatment of rat model of KOA was studied, and the possible mechanism of acupotomy therapy are discussed in detail, proved that acupotomy therapy can regulate the IL-1, TNF-a, and the abnormal expression of MMPs-3, resulting in the therapeutic effect, early step explains the mechanism of acupotomy cell molecular level for patients the treatment of KOA, and provide experimental evidence for clinical application and reliable treatment.

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# DOI 10.22448/AMJ.2017.3.69-70 STUDY ON HPLC FINGERPRINT OF TROLLIUS LEDEBOURII REICHB.

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Abstract Objective: To evaluate quality of medical materials by similarity calculation, establishing fingerprint characteristics analysis of Trollius ledebourii Reichb based on reversed phase high performance liquid chromatography (HPLC).

Methods: Referring to orientin, to analysis Trollius ledebourii Reichb from 12 different habitats by HPLC gradient elution, and process similarity calculation and system cluster analysis. Chromatographic conditions: Welch Materials Ultimate TMXB-C18(250 mm $\times$ 4.6 mm,5 $\mu$ m) chromatographic column, mobile phase of acetonitrile-0.16% phosphoric acid, 340 nm detection wavelength, 1.0 ml/min flow rate, 30°C column temperature .

Results: This study established HPLC fingerprint characteristics analysis of Trollius ledebourii Reichb, marked 17 common peak, and analysis methodology to investigate the results conformed to the requirements of fingerprint technology; Similarity and cluster analysis show that the quality of Trollius ledebourii Reichb is mainly related to its source.

Conclusion: This research method is reliable, reproducible and can be used for scientifevaluation and quality monitoring in medical material of Trollius ledebourii Reichb.

Key words: Trollius ledebourii Reichb; HPLC; Fingerprint; Orientin; Similarity; Cluster analysis

Trollius chinensis Bunge and T.ledebourii Reichb are both classified in Ranunculaceae tropaeolum genera [1]. T.ledebourii distributes mainly in Heilongjiang and north of Inner Mongolia, with effect of heat-clearing and detoxifying as Traditional Chinese medicine [2]. Modern pharmacological study indicates that it has function as antimicrobial, antiviral, antineoplastic and antioxidant activity etc, can be applied in treatment of upper respiratory infection. Its effective constituents mainly consist of total flavone, especially orientin and vetexin[3~4], moreover orientin can evidently act as resistance to oxygen-reoxyge-

nation injury and protection to myocardial cells[5]. It has been reported that total flavone is used as quantitative index for Trollius chinensis medical material, and orientin and vetexin are used as well by testing quantity of them with thin-layer chromatographic scanning (TLCS) or HPLC to monitor quality of Trollius chinensis. For scientific evaluation and monitoring quality of T. ledebourii, this research employed HPLC to confirm fingerprint of T. ledebourii, and supported theoretical foundation for feasibility that T. ledebourii is used as medicine.

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# SHALLOW RELATIONSHIP WITH FIVE INTERNAL ORGANS, VEINS AND ARTERIES FOR TALKING AN EAR Sun Li Ying , Dong Qing hua

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Abstract pass the cultural heritage and clinical observation that the machine check, hand checks a decade, summary: Ear department the pathological changes and its treatment principle cure in the dialectical theory of the foundation top is as inseparable as five internal organs and veins and arteries, the curative effect shows Zhao. Provided a theory basis for clinical better Shi Zhi.

Keywords: ear; Five internal organs; Sun through veins and arteries

Objective: Inquire into the five internal organs of ear and Chinese medicine and and the relation of the veins and arteries of acupuncture, provided more way of thinkings and theory for the clinical treatment ear disease basis.

Material and method: 1.Collect historical data, pass the cultural heritage that the machine check, hand checks a decade, take 《The Yellow Emperor's Classic of Internal Medicine 》 and each kind of ancient cultural heritage as blue origin, collect related and existing ancient works to talk about the historical data contents in the Zhao completely, explicit source.2.Tidy up historical data, with the kidney is begun to understand to an ear is main line argument ear and other four dirty relations;Induce an ear relationship with veins and arteries.

## Results and discussion:

1. Ear relationship with five internal organs, 《The Yellow Emperor's Classic of Internal Medicine 》 is one speech kidney" is in the Qiao an ear", one speech heart"Be begun to understand to an ear". According to above-mentioned treatise future generations hence with the kidney is begun to understand to ear but heart Be begun to understand to tongue for is saying, the heart is begun to understand to an ear and then be been getting more shelved and forgotten. Consequently caused to cure an ear disease falsely the certificate commence from the kidney many, cure from the heart Bian few. Ming Dynasty king be willing to the hall put forward in 《Zheng Zhi Zhun Sheng》:"The heart is in the Qiao a tongue, with the tongue non- crevice, due to sending Qiao at the ear then the kidney is the lord of ear Qiao, the heart is the guest of ear Qiao". Blend a heart kidney is respectively two kinds of theories of ear Qiao. People's disease two Xies descend little stomachache, eyes red painful Zi Yang, ear have no smell" with" year old fire too, burning hot popular, the lung gold is subjected to evil, the Nue of people's disease,......Yi dry deaf". Although this 2 didn't directly speak of ear and liver, lung two dirty relations, from the ruling list of "the ear has no smell",