respiratory system and many other tissues. This review discussed the neuroprotective effects of Schisandra chinensis and the treatment of brain disorders. Schisandra chinensis and its ingredients have potential advantages.

Keywords: Schisandra chinensis, lignans, Central Nervous System

1. Introduction　Schisandra chinensis（Turcz.）Baill. mainly produced in Heilongjiang, Liaoning, Jilin and Hebei of China, and it also known as wuweizi in traditional Chinese medicine [1]. The extracts obtained from the Schisandra chinensis fruit, showed abundant biological activities, such as hepatoregenerative, anti-HIV, antioxidant, anti-cancer and enhance immunity properties [2]. In recent years, the researches mainly focused on the liver and antitumor activities of Schisandra lignans and less on its traditional analgesic effect [3]. In this paper, we reviewed the chemical components of Schisandra chinensis and its pharmacological effects in the central nervous system in order to provide the basis for the wide application of Schisandra chinensis in the central nervous system.

2.Component and Structure　Recent results showed that Schisandra chinensis had a variety of chemical constituents, including lignans, triterpenes, sesquiterpenes, volatile oils, polysaccharides, flavonoids, organic acids and amino acids, among which the main chemical constituents were lignans [4]. Volatile oil extracted from Schisandra chinensis contains sesquiterpene, monoterpene and a small amount of acid, the main component is sesquiterpenoid [5]. In addition to the chemical compositions above, Schisandra chinensis also contains inorganic elements and flavonoids.

3.Effects on the Central Nervous System　Schisandra chinensis has obvious sedative hypnosis, protect the brain and improve the cognitive effects. Schisandra chinensis and its constituents are known to have the beneficial effects on central nervous system(CNS) disorders including the cognitive performance, memory, and neurodegenerative diseases.

Many studies have identified the neuroprotective properties of S. Chinensis extraction and lignans especially dibenzocyclooctadiene-type lignans. Such as, Schisantherin A, 7,8-seco-lignans and tetrahydrofuran lignans all showed protective effects in SH-SY5Y, α-iso-cubebene increased the primary corticalneuron cell survival [6]. Local administration of Schisandra in brain-damaged rats showed a significant improvement in learning and memory [7]. Schisandrin C has been reported to improve short-term or working memory [8]. Recent studies suggested that Schisandra lignans produced sedative and hypnotic bioactivities. Schisandra lignans, in particular, its monomer Schisandrin A has an anticonvulsant effect.

4. Conclusions and Future Perspective　Schisandra chinensis has been used for thousands of years as traditional medicine. The results reviewed above suggest that its constituents are effective to produce the beneficial effects on central nervous system, including neuroprotection, learning and memory, sedative-hypnotic and anxiolytic, antidepressant, anticonvulsant and analgesic. However, Schisandra chinensis lignans which influenced the central nervous system has not been fully elucidated. Schisandra chinensis also has significant of anti-anxiety, antidepressant, anticonvulsant, analgesic, improve cognitive function, protect nerve cells and other effects, it needs to be exploited in the future.

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STUDIES ON THE ANTIOXIDANT ACTIVITY OF EXTRACTS FROM SCHISANDRA CHINENSIS

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Abstract　We have done a experiment about different extract parts of Schisandra chinensis restrain antioxidant properties were assessed by scavenging actiity of DPPH free radical and scavenging actiity of hydroxyl free radical. The results suggest that the ethyl acetate fraction of Schisandra chinensis is a significant source with potential antioxidant activity.

Key words: Schisandra chinensis; Extraction component; Antioxidant activity

Alzheimer's disease (AD) is a neurodegenerative disorder characterized by loss of memory and cognition. In addition to cancer and cardiovascular disease, AD is difficult to cure, too. There are more and more elderly people in the world at present; Alzheimer's disease is a serious social problem which affects the health of old people[1]. The cause of AD is not clear at present, and thus the effective therapeutic options for AD are limited. In the wake of the development of modern science and technology and the theory of traditional Chinese medicine, the disease of traditional Chinese medicine treatment has concerned by many scholars, this therapic method has gradually become a new direction for the research of many scholars[2].

Schisamdra chinensis is a kind of traditional Chinese medicines, it has a long history. This medicine has been the focus of attention and research in China and foreign countries. In the wake of developments in modern pharmacology, the scope of pharmacological study of Schisandra chinensis is constantly expanding[3-4]. According to the cholinergic theory, oxidative stress theory, free radical theory in Alzheimer's disease, we have done a experiment about different extract parts of Schisandra chinensis antioxidant activity, the antioxidant activity of Schisandra chinensis extracts were studied in order to further reveal the potential of Schisandra chinensis in the treatment of Alzheimer's disease.

Objective To investigate the antioxidant activity of extracts from Schisandra chinensis.

Materials and methods Schisandra chinensis was extracted by ethanol heating reflux, respectively with dichloromethane, ethyl acetate, n-butanol and water extracted components, Vitamin C as a positive control. The clear DPPH free radical ability of each component was determined by DPPH method, the clear hydroxyl free radical ability of each component was determined by fenton reagent method, the higher the clearance rate, the stronger the antioxidant capacity of the samples.

Results and discussion The experimental results showed that the ethanol extract of Schisandra chinensis and dichloromethane, ethyl acetate, n-butanol and water extracted components showed different antioxidant activities, with the concentration gradually increased antioxidant activity showed an increasing trend. The scavenging rate of DPPH free radical (IC50=0.62±0.01 mg/ml) and hydroxyl free radical (IC50=0.07±0.01 mg/ml) of ethyl acetate component was the highest in all components. The scavenging effect of the other components on DPPH radicals was from strong to weak: dichloromethane component> ethanol extract> water component> n-butanol component, IC50 values were 0.91±0.01 mg/ml, 1.08±0.02 mg/ml, 1.64±0.02 mg/ml, 1.75±0.06 mg/ml. The scavenging effect of the other components on hydroxyl radicals was from strong to weak: ethanol extract> n-butanol component> water component> dichloromethane component, IC50 values were 0.19±0.01 mg/ml, 0.21±0.02 mg/ml, 0.51±0.01 mg/ml, 0.72±0.01 mg/ml.

Ethyl acetate fraction of Schisandra chinensis can be showed good antioxidant activity, the results for the further study of antioxidant activity of Schisandra chinensis provide a theoretical basis.

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RESEARCH PROGRESS OF FLAVONOID SASAN ACTIVE COMPONENT IN THE TREATMENT OF ACUTELUNG IN JURY

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Abstract Acute lung injury is one of the most common and refractory diseases in clinic.It can develop into acute respiratory distress syndrome.The mortality rate of this disease is high,up to 30%-40%.Traditional Chinese medicine and its active components usually have good biological activity and curative effect.This article will review the Research progress of flavonoids as an active component in the treatment of acute lung injury.

Key words: traditional Chinese medicine,active ingredient,flavonoids,Acute lung injury/acute respiratory distress syndrome.

Objective To summarize the research progress of the effect of flavonoids on acute injury, and to provide reference for the development of effective traditional Chinese medicine for the treatment of acute lung injury.

Materials and methods Taking "traditional Chinese medicine", "effective component", "acute lung injury" and "Protective effect" as the key words.Comprehensive query the relevant literature which in PubMed, CNKI, and WanFang database from January 2000 to April 2017.

Results and discussion Flavonoids is a class of plant secondary metabolites widely found in nature.It has many physiological functions, such as anti inflammation, anti - cancer, anti - oxidation, decreasing blood glucose and so on.According to the current research progress, the effective Flavonoidscomponents of traditional Chinese medicine for the treatment of acute lung injury include: kaempferol, morin,quercetin, breviscapine.