nine contents increased significantly in total saponins groups.

Guanosine, creatinine and uric acid were important biological markers in the occurrence and development of gouty arthritis. Total saponin of RDN have potential effects on the treatment of gouty arthritis by regulating the content change of these biomarkers.

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RESEARCH PROGRESS ON IMMUNE EFFECTS OF CYCLOARTANE TRITERPENOIDS FROM ASTRAGALI RADIX

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Abstract With retrieval literature review data on modern pharmacological study of Astragalus saponins in recent 10 years, the article summarized the pharmacological effects and mechanism on immune activity of cycloartane triterpenoids from Astragali Radix, in order to provide references for the further research on the mechanism of immune activity of Astragalus cycloartane triterpenoids.

Key words Immune effect; Cycloartane triterpenoids; Astragali Radix; Research progress

Recent studies have shown that astragalus saponins also have definite immune activity. Especially the cycloartane triterpenoids, such as astragaloside Ⅰ, astragaloside Ⅱ, astragaloside Ⅲ, and astragaloside Ⅳ, but the mechanism is still unclear.

Large number of studies showed that astragaloside had clear immune enhancement effect. cycloartane triterpenoids can enhance the immune function of mouse peritoneal macrophages. Ding found astragaloside Ⅳ can adjust the cell proliferation and cytokine secretion with a two-way adjustment function on the immune function. Research also found astragaloside II enhanced the activation of T cells by regulating the activity of PTPase CD45. Liu found the high levels accumulation of astragaloside Ⅲ in the thymus and spleen. The distribution suggested that it is the main target of the immune response.

To sum up, the pharmacological study of astragalus saponins mainly concentrated in total astragaloside and astragaloside Ⅳ, little in astragalus saponin I, II and III, while the research on other cycloartane triterpenoids severally is blank, it needs to further research. The author also found that dose-effect relationship of Astragalus saponins on the immune regulation activity is not clear. Astragalus saponins had bidirectional regulation effect on the immune response, so it is worth further study in order to know well the dose-effect relationship and ensure the clinical medicine effectiveness and safety of astragalus saponins on treatment of immune diseases.

THE RESEARCH OF NANOMETER TRADITIONAL CHINESE MEDICINE ON HEPATOCELLULAR CARCINOMA

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Abstract: Hepatocellular carcinoma (HCC) with high morbidity and mortality is one of the most common diseases of digestive diseases and rising. At present, surgery, radiotherapy and chemotherapy is used for the treatment of HCC in clinic, but drug is also essential treatment tools. However, poor selectivity and absorption rate of the drugs and multidrug resistance lead to a therapeutic effect for HCC patients not ideal. Traditional Chinese medicine (TCM) has unique advantages in the treatment of HCC. And nanotechnology can make drugs to transport directly to the target organ and militate. Nanometer TCM (NTCM) combines the advantages of TCM and nanotechnology, which solve the above problem effectively. In this paper, we introduce the effects of NTCM on HCC and research progress.

Key words: hepatocellular carcinoma, nanometer traditional Chinese medicine, target point

Introduction Hepatocellular carcinoma (HCC) is one of the most common diseases in clinic with the high death rate. At present, the morbidity of HCC is rising in China, and surgical treatment and adjuvant therapy have their own limitations[1]. So it is necessary to find a rapid and available method to cure HCC. Compared with the traditional tumor adjuvant therapy, NTCM is more effective and selective to kill a large number of liver cancer cells with smaller damage of body, which is new trend of development and research in the field