INPLASY PROTOCOL

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Conflicts of interest:
None.

Meta-analysis of Buzhong-Yiqi Decoction for chronic glomerulonephritis

Zhang, LB[1]; Liu, GZ[2]; Liang, YC[3].

Review question / Objective: **The purpose of this review is to systematically evaluate the efficacy and safety of Buzhong Yiqi Decoction in the treatment of chronic glomerulonephritis (CGN).**
Condition being studied: **Chronic glomerulonephritis (CGN) is based on proteinuria, hematuria, edema, and hypertension as the basic clinical manifestations . In recent years, with the influence of environment, diet, drugs and other factors, the incidence of end-stage renal disease has reached 791/100 million and is increasing at a rate of 5.29%. Some literature pointed out that CGN is the leading cause of chronic renal failure in China . Western medicine is mainly symptomatic treatment, mainly on antihypertensive, diuretic, anticoagulant, immunosuppressive, there is currently no specific treatment for CGN. After thousands of years of development, traditional Chinese medicine has valuable experience in the treatment of CGN. Many studies have shown that Buzhong Yiqi Decoction has obvious advantages in the treatment of CGN. This study aims to systematically evaluate the efficacy and safety of Buzhong Yiqi Decoction for CGN, with a view to providing a reference for clinical treatment.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 13 May 2020 and was last updated on 13 May 2020 (registration number INPLASY202050048).

INTRODUCTION

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METHODS

Participant or population: Patients with chronic glomerulonephritis.

Intervention: The experimental group A:add Buzhong Yiqi Tangjia on the basis of the control group (Integrated Traditional Chinese and Western Medicine Group) B:Treatment with Buzhong Yiqi Decoction alone (Chinese Medicine Group).

Comparator: The control group (Western medicine group) used positive control Western medicine (irbesartan, benazepril hydrochloride tablets, losartan potassium tablets, hydrochlorothiazide tablets, etc.).

Study designs to be included: Only randomized controlled trial will be included.

Eligibility criteria: (1) Literature research type: RCT applying Buzhong Yiqi Decoction to treat chronic nephritis (2) Research object: meet the CGN related diagnostic criteria, the diagnostic criteria refer to "Nephrology" (3) Baseline: experimental group and the control group was comparable in terms of gender, age, course of disease, treatment course, etc). (4)Intervention:The control group (Western medicine group) used positive control Western medicine (irbesartan, benazepril hydrochloride tablets, losartan potassium tablets, hydrochlorothiazide tablets, etc.),The experimental group A:add Buzhong Yiqi Tangjia on the basis of the control group (Integrated Traditional Chinese and Western Medicine Group) B:Treatment with Buzhong Yiqi Decoction alone (Chinese Medicine Group).

Information sources: Computer search of CNKI, WAN-Fang Data, VIP, CBM, Pubmed, EMbase, Cochrane Library, etc.

Main outcome(s): 1 - Clinical total effective rate 2 - Cure rate 3 - 24h urinary protein quantification (24hUpro) 4 - Serum creatinine(Scr) 5 - Blood Urea Nitrogen (BUN) 6 - The scores of TCM symptom manifestations 7 - Recurrence rate.

Quality assessment / Risk of bias analysis: The Cochrane Collaboration Network bias risk assessment tool was used to evaluate the quality of the included literature, which was independently conducted by two researchers. The content mainly includes: 1 - random allocation method 2 - blind method (including the tester and test object, test data processor) 3 - Hidden allocation scheme 4 - Selectively report research results 5 - Completeness of result data 6 - Other sources of bias.

Strategy of data synthesis: Heterogeneity test: included heterogeneity between studies using X2 test and I2 test, when I2 0.1 indicates no heterogeneity between studies, fixed effect model was used to combine the effect size; otherwise, the differences between studies Strong qualitative, using random effects model.Binary variables use risk ratio (RR) as the analysis statistic, continuous variables use mean difference (MD) and weighted mean difference (WMD) as statistics, and give the effector's effect value and its 95% confidence interval (CI). When the included literature>10,the publication bias was described by directly observing the symmetry of the inverted funnel chart.

Subgroup analysis: According to the intervention measures, it was divided into two subgroups: integrated traditional Chinese and western medicine group VS

western medicine group (subgroup 1), traditional Chinese medicine group VS western medicine group (subgroup 2).

Sensibility analysis: **We will conduct sensitivity analyses by omitting studies one by one to probe the impact of an individual study.**

Country(ies) involved: **China.**

Keywords: **Buzhong-Yiqi Decoction; Chronic Glomerulonephritis; Systematic review; Meta- analysis.**

Contributions of each author:
Author 1 - LiBo Zhang - Search strategy, study selection, data extraction, data analysis, article writing.
Author 2 - GuangZhen Liu - Description of results and writing of the article.
Author 3 - YanChuang Liang - Study selection, data extraction, article writing.