Psoriasis is a common, chronic, recurring inflammatory disease of the skin, whose typical signs are scaly plaques and papules.\(^{(1)}\) The morbidity rate in the world population is around 0.06%, slightly higher in Caucasians (1.5%–3.5%) and lower in Asians (about 0.3%). Patients were 28 years old on average, with no significant difference in sexes.\(^{(2-4)}\) An epidemiologic investigation of community health carried out from 2007–2008 in 6 provinces and cities in China showed its morbidity of 0.47%.\(^{(5)}\)

Psoriasis can be categorized into 4 types, psoriasis vulgaris, psoriasis arthropathica, pustular psoriasis, and erythrodermic psoriasis, according to their respective clinical patterns. More than 90% of cases can be classified as psoriasis vulgaris.\(^{(1)}\) Radical treatment on the disease is currently lacking. The conventional Western medicines, such as methotrexate, retinoids, and cyclosporine, are not suitable for long-term application due to their limited efficacy and various potentially toxic side effects.\(^{(6)}\) New biological preparations have not seen extensive used because of their costliness and the uncertainties regarding adverse reactions, remote effects, and safety.\(^{(1)}\)

External therapy involves applying drugs, certain actions, physical measures, or using instruments directly on surface or position of illness locally. It uses the same therapeutic mechanisms as internal therapy but different medication paths. Chinese medicine (CM) has a long history of treating psoriasis, and CM external therapy has received great welcome by patients for its wide selection of techniques, high pertinency, directness of action, convenient
employment, assured efficacy, less side effects, and low cost.

Many studies have been performed to observe the efficacy of externally applied Chinese herbal drugs (ex-CHD) in the treatment of psoriasis vulgaris in recent years. However, high-level, evidence-based medicine evidence of its effects and side effects are still lacking. This study attempts to assess the efficacy and safety of ex-CHD for the treatment of psoriasis vulgaris using the Cochrane systematic method.

METHODS

Database and Search Strategies

Comprehensive literature searches were performed on several overseas databases, including PubMed/MEDLINE, EMBASE, Cochrane Library (through Issue 1 of 2011), and Cochrane Central Register of Controlled Clinical Trials using search terms such as psoriasis, medicine, Chinese traditional drugs, Chinese herbal, unguents, salves, pastes, ointment, bath, steam bath, controlled clinical trial, and random. The Chinese databases China Biology Medicine Disc (CBM), Chinese National Knowledge Infrastructure (CNKI), Wanfang database, and VIP database were also searched using corresponding subject headings in combination with keywords and/or freewords (selected depending on the requirements of the database) as search terms from their inception through July 2011. No limitation on language was defined. References in searched titles were carefully checked to confirm credibility.

Inclusion Criteria

(1) Designation: all randomized controlled clinical trials (RCTs) on psoriasis vulgaris treated by Chinese herbal drugs regardless of method (blinded or concealed allocation). (2) Subject selection: patients with diagnoses consistent with international or domestic diagnostic standards with no restriction on age, nationality, or sex. (3) Intervention measures: test groups received ex-CHD (in the form of compound prescriptions, Chinese patent medicines, or a single drug), either alone or in combination with Western drugs or physical therapy. Control groups used placebos that were given in the same form and administered through the same path. (4) Final outcome was evaluated predominantly by the psoriasis area and severity index (PASI) combined with the Nimodipine method, and the the efficacy index (EI) was calculated as follows: EI = (Pre-treatment PASI score – Post-treatment PASI score)/Pre-treatment PASI score × 100%. The effect of treatment was determined in 4 grades: clinically cured, markedly effective, effective, and ineffective. The total effective rate was defined as follows: (Cases cured + Cases markedly effective)/Total number of cases × 100%. Rates of adverse reactions and recurrence were taken as the secondary indices for evaluation.

Exclusion Criteria

In the repeatedly published papers of an identical clinical trial, only one with more complete data and information was included.

Data Extraction and Quality Assessment

RCTs were screened out using the instructions given in the Cochrane Handbook for Systematic Reviews of Interventions (Version.5.1.0): (1) Introduce the outcomes of searching into the literature management software. (2) Discard duplicate and apparently outlying reports. (3) Acquire the fulltext of all potentially relevant reports. (4) Combine multiple reports that discuss the same study. (5) If some data have been missed, obtain them by contacting the head researcher. (6) Review the reports according to the above-mentioned inclusion criteria. (7) Determine the final enrollment. Steps (1)–(5) were performed by the first author of this review (LI Nuo). The last two steps, (6) and (7), were carried out independently by two reviewers (LI Nuo and GUO Wei). In cases of different opinions, disputes were settled by discussion or by consultation with a third party (LI Hong-yan). Data were extracted independently by two researchers according to the pre-defined extraction table. Disagreements were settled by discussion with a third party.

The quality of included RCTs was assessed by the methods recommended by Cochrane Collaboration. Each included trial was assessed using the 7 criteria (random sequence generation; allocation concealment; blinding of participants and personnel; blinding of outcome assessment; incomplete outcome data; selective reporting; other sources of bias) for a judgement of "low risk" of bias, "high risk" of bias, or "unclear risk" of bias. The methodological quality of trials was assessed to the following 3 categories: Grade A (low risk of bias): all of the criteria met; Grade B (moderate risk of bias):