Rational use of the prescriptions contained Aconitum herbs in the treatment of rheumatoid arthritis: A risk-benefit assessment

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Objective: Evaluating the benefit and risk of prescriptions containing Aconitum herbs in the treatment of Rheumatoid Arthritis (RA), in order to promote its rational use in clinic.

Method: Based on the methods of Delphi survey and literature survey, a risk-benefit assessment system of Aconitum herbs for treating RA was established. And according to the data from random clinical trials (RCTs), the risk and benefit value and the probability of options difference, which contained different patterns, varieties, dosage, course of treatment and combination therapy, was respectively calculated by the optimal multi-criteria decision analysis method. Results: A total of 21 RCTs were included. Only 7 of 21 RCTs mentioned the pattern of RA, which all were anemofrigid-damp arthralgia and its risk-benefit value was 52(48.44,55.56). The varieties involved Aconiti Radix (Chuanwu), Aconiti Kusnezoffii Radix (Caowu), and Chuanwu-caowu, whose risk-benefit values were 52(48.44,55.56), 51(47.51,54.49) and 46(42.85,49.15). The probability of the risk-benefit of Chuanwu was superior to Caowu and Chuanwu-Caowu were 62.35% and 98.25%. The risk-benefit value of dosage 4~9g, which was 58(54.03, 61.97), was 100% superior to higher dosage. The course of treatment had little effect on the medication risk and benefit. And using the prescriptions that containing Chuanwu or Caowu had better risk-benefit value than that using combined western medicines, which two difference was 7(1.48, 12.57). The result was relatively stable.

Conclusion: The existing clinical evidence showed that the risk-benefit value of the prescriptions that contained Aconitum herbs in the treatment of RA ranged from 41 to 58. In order to reduce the risk of medication, Chuanwu should be mainly used in clinical, with the lower dosage, short course of treatment and none combination using with western medicines.

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