Clinical Study on Long-Term Treatment of Ankylosing Spondylitis with Integrative Medicine

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ABSTRACT

Objective: To seek for a new method of integrated Chinese and western medicine in treating ankylosing spondylitis (AS) to control the disease development, shorten the therapeutic course and lower disability rate. Methods: Patients of AS enrolled in this study were 106 cases in Group A, who were persistently treated with traditional Chinese medicine and western medicine (TCM-WM) for over 10 months, 48 cases in Group B treated with WM and 34 cases in Group C treated with non-steroid anti-inflammatory and analgesic agents. They were followed-up for 2 years. Results: (1) Short-term effect: The markedly effective rate in the 3 groups was 73.58%, 47.92% and 5.88% respectively, and the total effective rate was 96.23%, 87.50% and 41.18% respectively. The comparison of Group A with Group B and C showed significant difference, the effect in Group A was superior to that in Group B and Group C ($\chi^2 = 10.58, P<0.01$ and $\chi^2 = 67.76, P<0.01$ respectively). (2) Results of 2-year follow-up: the recurrence rate in Group A was 18.37% (9/49), it was insignificantly different from that in Group B (7/23, 30.43%, $\chi^2 = 1.32, P>0.05$), but significantly different from that in Group C (8/12, 66.67%, $\chi^2 = 11.19, P<0.01$). Conclusion: Long-term TCM-WM therapy, which combined the advantages of Chinese and western medicine, was a practical method in treating AS with reliable effect, few side-effects, and therefore is worth popularizing.

KEY WORDS ankylosing spondylitis, integrated Chinese and western medicine, long-term therapy

Ankylosing spondylitis (AS) is a rheumatic disease with high incidence, inducing disability and invading the spinal axial joint as its chief characteristics. From 1995 to 2000, a clinical study by the authors using methods of integrated Chinese and western medicine to treat 219 AS patients systematically was conducted over 10 months with 2-year follow-up, and it is reported as follows.

METHODS

Clinical Data

In the 219 cases of this group, 157 were inpatients and 62 outpatients, all of them conformed with the revised New York standard of confirmatory diagnosis criteria for AS. According to X-ray film of sacroiliac joint, the patients were divided into early, middle and late stage cases; in early stage: the function of spinal activity is limited, X-ray showed that the interspace of sacroiliac joint becomes vague, the small vertebral joint normal or with interspace changes; in middle stage: the spinal activity gets limited, even ankylosis occurs in part of them, X-ray reveals the zigzag change of sacroiliac joint, part of the ligament gets calcified, square vertebra, the osseous substance of small joint destroyed, and interspace vague; in late stage: ankylosis occurs in the spinal column, which gets or fixed at hunchback deformity, X-ray showed the sacroiliac joint fusion, the spinal column manifested bamboo-joint-like alteration.

According to randomized serial table, a completely randomized method was adopted, and the patients were divided into the traditional Chinese medicine and western medicine (TCM-WM) treated group (Group A), WM control group (Group B), and single non-steroid anti-inflammatory analgesics control group (Group C). Those with the last figure as 0–5 was put into Group A (119 cases), those with the last figure as 6 and 7 was put into Group B.
(57 cases), and those with the last figure as 8 and 9 was Group C (43 cases). Cases who went through the whole therapeutic program over 10 months in Group A was 106 cases, in Group B 48 cases and in Group C 34 cases. Owing to toxic and side-effects and other causes, patients who could not insist through the above-mentioned program were 13 cases in Group A, 9 cases both in Group B and Group C, altogether 31 cases were dropped out from the total cases.

In the 106 cases of Group A, 52 cases was first consulted as damp-heat obstructed collateral (DHOC) syndrome, 41 as damp-cold obstructed collateral (DCOC) syndrome, 13 as liver-kidney deficiency (LKD) syndrome, 75 as human leukocyte antigen (HLA-B27) positive, 31 negative, male 93 cases, female 13 cases, age ranging 14 - 43 years old, 21.61 ± 3.94 years on average; illness course 3 months to 20 years, 5.02 ± 6.98 years on average; in early stage 66 cases, middle stage 31 cases and late stage 9 cases; Group B: HLA-B27 positive 34 cases, negative 14 cases, male 42 cases, female 6 cases, age ranging 15 to 40 years old, 21.81 ± 4.11 years on average; illness course 3 months to 16 years, 5.29 ± 6.89 years on average; in early stage 30 cases, middle stage 14 cases and late stage 4 cases; Group C: 34 cases, HLA-B27 positive 25 cases, negative 9 cases, male 30 cases, female 4 cases, age ranging 15 - 37 years old, 22.01 ± 4.02 years on average; illness course 4 months to 14 years, 5.11 ± 7.09 years on average; in early stage 22 cases, middle stage 10 cases and late stage 2 cases. After statistical analysis, among clinical data of the 3 groups, there was no significant difference.

**Therapeutical Methods**

Group A: TCM treatment used powdered form of AS series based on disease staging and syndrome differentiation principles, which was provided by the Preparation Department of the 208th Hospital of PLA, chiefly to reinforce vitality and dispel evil pathogen, activate blood circulation to unobstruct blocking. The recipe consists of H. Hedyotis diffusa, H. Scutellaria barbata, R. et Rh. Acanthopanax senticosus, R. Astragalus membranaceus, Ca. Spatholobus suberectus, R. Salvia miltiorrhiza, R. Angelica sinensis, R. Paeonia rubra, Rh. Homalomena occulata, etc., their proportion was 4:3:4:4:3:3:3:4 and they were processed in different suitable ways into the powder form, taken orally, 10 g each time, 3 times a day. It may be modified according to syndrome variations: To those with DHOC syndrome heat-toxin and dampness clearance were needed, fresh R. et Rh. Rheum palmatum, R. Stemona sessilifolia, C. Dictamus dasycarpus, R. Gentiana manshurica, Fr. Gardenia jasminoides and R. Scutellaria baicalensis, etc. were added and properly processed into powder form according to the proportion of 4:4:5:4:3:3; to those with DCOC syndrome who needed to have cold-damp dispelled, H. Siegesbeckia orientalis, R. Angelica pubescens, R. Gentiana macrophylla and R. Stephana tetrandra, etc. were added and processed properly into powdered form according to the proportion of 5:3:3:3; to those with LKD syndrome nourishing liver-kidney and reinforcing bone, Rh. Drynaria fortunei, R. Dipsacus asper, R. Scrophularia ninpoensis and C. Paeonia suffrutosica etc. were added and properly processed into powdered form according to the proportion of 6:4:4:3. After administering consecutively for half a year, the treatment may continue for 4 more months depending on the patients’ condition. During the courses, herbal medicine for soothing wind and unobstructing collateral, dispersing cold to stop pain could be supplemented, and sauna using drug steam applied.

WM treatment: Methotrexate was injected (MTX, each ampoule 5 mg, produced by Zhejiang Wanma Pharmaceutical Company, Ltd.) intravenously, with the initial dosage as