Description of acupuncture at Cervical Jiaji points, the waist with Shujin setting function, can effectively reduce spasticity due to upper motor neuron injury, spasticity have definite therapeutic effect.

Reference

- [1]Nazzal M, Sa'adah MA, Al-Ansari D, et al. Stroke rehabilitation: application and analysis of the modified Barthel index in an Arab community. Disabil Rehabil. 2001, 23 (1): 36-42.
- [2] George Adeerman. Encyclopedia of neuroscience. Shanghai: Burke Howie Sal out Press and Shanghai science and Technology Press, 1992:302.
- [3] Li Peng Hong. Assessment and treatment of spastic hemiplegia. Chinese Journal of rehabilitation medicine, 1993,8 (2):91-92.
- [4]Li Peifang [4] antagonist muscles. Acupuncture treatment of post-stroke hypermyotonia [J]. Chinese Journal of rehabilitation, 2001,16 (1): 42 43
- [5]. Chen Jiajun. Lily, promoting [D]. clinical research of treatment of Limb Dyskinesia due to apoplexy preservation: JilinUniversity, 2001

Clinical Observation on 51 Patients with Parkinson's Disease Treated by Yangjinhua Powder Capsule

WANG Yulin¹, SUN Shentian¹, WANG Mansu², HAN Yuedong³, KUANG Haixue⁴

(1.The Second Affiliated Hospital of Heilongjiang University of Chinese Medicine, Harbin 150001 China; 2.The First People's Hospital of Yuexiu District of Guangzhou; 3.Harbin Institute of Modern Chinese Medicine; 4.College of Pharmacy, Heilongjiang University of Chinese Medicine)

[Abstract] Objective: Observe the clinical effect of Yangjinhua Powder Capsule (Flos Daturae Powder Capsule) in the treatment of Parkinson's disease (PD). Methods: Of the 51 PD patients,15 who came for the first visit were administered Yangjinhua Powder Capsule only, and 36 who had been taking western medicine were given Yangjinhua Powder Capsule without stopping using the original medicine. The Unified Parkinson Disease Rating Scale (UPDRS) was used to score the patients before treatment, 7 days, 3 months, and 6 months after treatment respectively, and as well to evaluate the total effect and untoward reactions. Results: After treatment, 29 (56.86%) patients were remarkably improved; 11 (21.57%) patients were improved; and 2 (3.92%) patients were slightly improved. Totally 42 patients were improved. The total effective rate was 82.35%. After 7 days' treatment, the improvement of tremor was significant (P<0.05). After one month's treatment, the total score of UPDRS, UPDRS II and UPDRS III scores, and tremor and myotonia scores were all significantly improved (P<0.05 or P<0.01). Conclusion: Yangjinhua Powder Capsule is effective in improving the clinical symptoms of PD patients.

[Key Words] Yangjinhua Powder Capsule (Flos Daturae Powder Capsule); Parkinson's Disease (PD); Unified Parkinson Disease Rating Scale (UPDRS); tremor; myotonia

Introduction

Parkinson's disease (also known as paralysis agitans) is a degenerative disorder of the central nervous system which is more common in the elderly. The main clinical symptoms of it are resting tremor, myotonia, slowness of movement and difficulty with keeping balance in walking and gait. Since early 1960s, PD is treated mainly through the use of levodopa which is always the first choice to control the disease. However, using levodopa drugs for long time will become ineffective at treating the symptoms, and some harmful reactions such as dyskinesia will appear^[1]. In recent years, the scholars of the world praise highly the treatments with the use of dopamine receptor agonists and levodopa, but the curative effect is unsatisfactory, either. In consideration of that, we

have probed to use Yangjinhua Powder Capsule in the treatment of PD since the year of 2005. The following report is about the result of our research.

Materials and methods

1.1 General Material

All the 51 cases were the clinical patients of Harbin Institute of Modern Chinese Medicine from February 2005 to October 2008. Of the 36 male and 15 female patients, the ages are from 45 to 88 with the average age (64.75 ± 10.23); the course of disease are 0.25 to 13 years with the average year (3.48 ± 3.41); the state of their illness according to HOEHN &YAHR Grade Standard[2] are 3 in grade 1, 7 in grade 1.5, 8 in grade 2, 4 in grade 2.5, 15 in grade 3, 9 in grade 4, 5 in grade 5, with 37 not seriously ill patients from grade 1 to 3 and 14 seriously ill patients from grade 4 to 5. Of the 36 PD patients who had been taking western medicine, 24 who took Doba hydrazine (Madopar) or Carbidopa and Levodopa controlled release pellets (*XI NING*) in $62.5\sim250$ mg three times daily, 5 who took piribedil sustained-release tablets (Trastal) in combination in 50mg three times daily, 2 who took Tab Amantadine in combination in 100mg two times daily, 2 who took artane in combination in $1\sim2$ mg three times daily, 3 who took artane only in $1\sim2$ mg three times daily. The other 15 patients who came for the first visit didn't take any antiparkinsonian drugs.

1.2 Inclusion Criteria

① Conforming to Chinese PD Diagnosing Standard of 2006^[3], and the cases were all diagnosed as primary PD patients. ② With two or more clear diagnoses by western medical hospitals, the curative effects were not satisfying by western medicine treatment. ③ Grade 1 to 5 of the HOEHN &YAHR Grade Standard. ④ The patients accepted of their free will with good compliance and signed the agreements on the treatment about taking Yangjinhua Powder Capsule at least 6 months. ⑤ The PD patients had no previous medical history of hepatic or renal dysfunction.

1.3 Medication Administering Method

15 patients who came for the first visit were administered Yangjinhua Powder Capsule only. The Chinese medicine Yangjinhua was ground into fine powder and put into each capsule with 0.25g power. The power capsules that were supplied by Heilongjiang University of Chinese Medicine and tested by its College of Pharmacy are in compliance with the statutory standards. Each patient took orally 1 capsule before sleep in the evening, or half a capsule in the morning and half in the evening. The other 36 patients who had been taking western medicine added the same treatment without stopping using the original medicine. The periods under observation were both 6 months.

1.4 Observing Content

All the patients were evaluated on clinical curative effect according to the Unified Parkinson's Disease Rating Scale (UPDRS) [4] before treatment, and after 7 days, 1 month, 3 months, and 6 months in the treatment. The evaluation included UPDRS II, UPDRS III, and Symptom Improvement Score (Tremor and Myotonia). The untoward reactions of patients were observed meanwhile.

1.5 Curative Effect Evaluating Standard

Referring to the standard from some documents^[5], use the following formula to evaluate the curative effect on base of the scores before treatment. Improvement Rate (%) = (score before treatment – score after treatment) / score before treatment × 100%. "Ineffective" means Improvement Rate (IR) = 0. "Slightly Improved" means IR is $1\%\sim19\%$. "Improved" means IR is $20\%\sim49\%$. "Remarkably Improved" means IR $\geq50\%$.

1.6 Statistics Method

We adopt SPSS 13.0 statistics software to process the data. The metering data is given by "mean number \pm standard deviation ($\overline{X} \pm s$)", and the paired t test is used. The count data is given by percentage, and the chi-square test is used.

Results and discussion

2.1Total Curative Effect of 51 PD Patients

After treatment with Yangjinhua Powder Capsule to the 51 PD patients, 29 (56.86%) patients were remarkably improved; 11 (21.57%) patients were improved; 2 (3.92%) patients were slightly improved, and the treatment was ineffective for 9 (17.65%) patients. The total effective rate was 82.35%.

2.2 Comparisons of the UPDRS and Symptom Improvement Score (SIS) of 51 PD Patients

After 6 months' treatment, the Improvement Rate (IR) of the total score in UPDRS of the patients is 46.56%; the IR of UPDRS II score is 48.13%; the IR of UPDRS III score is 45.71%; the IR of SIS for Tremor is 61.02%; and the IR of SIS for Myotonia is 54.25%. Table 1 shows that after 7 days' treatment, the SIS for Tremor was obviously lowered, and the difference was statistically significant (P<0.05). After one month's treatment, the total score of UPDRS, UPDRS II and UPDRS III scores, and SIS for tremor and myotonia were all obviously lowered. And the longer the treatment was, the more obviously the scores lowered. The difference was statistically significant (P<0.05 or P<0.01).

2.3 Comparisons of the UPDRS and SIS of 15 PD Patients Who Came for the First Visit

The clinical symptoms of 13 cases from the 15 patients who came for the first visit were effectively improved. After 6 months' treatment, the Improvement Rate (IR) of the total score in UPDRS of the patients is 62.77%; the IR of UPDRS II score is 64.44%; the IR of UPDRS III score is 61.34%; the IR of SIS for Tremor is 63.86%; and the IR of SIS for Myotonia is 76.29%. Table 2 shows that after 7 days' treatment, the SIS for Tremor was obviously lowered, and the difference was statistically significant (P<0.01). After one month's treatment, the total score of UPDRS, UPDRS II and UPDRS III scores, and SIS for Myotonia were obviously lowered except SIS for Tremor. And the longer the treatment was, the more obviously the scores lowered. The difference was statistically significant (P<0.05 or P<0.01). The difference in the SIS for Tremor was not statistically significant (P>0.05) after 7 days, 1 month, 3 months, and 6 months in the treatment.

Table 1: Comparisons of the UPDRS and SIS of 51 PD Patients at Different Time (score, $\overline{X}_{\pm S}$)

Different Time in Treatment	Cas	UPDRS			Symptom Improvement Score (SIS)		
	e	Total score	UPDRS II score	UPDRSIII score	Tremor	Myotonia	
Before	51	53.82±22.27	21.88±8.99	29.25±11.09	7.08±3.48	4.24±2.29	
7 days	51	50.25 ± 22.22	20.41±8.94	27.18±11.12	$5.08\pm3.08^*$	3.94 ± 2.06	
1 month	51	40.35±22.81*	16.08±9.41	22.22±11.65*	4.53±2.96**	3.16±2.06*	
3 months	51	32.51±23.28*	12.80±9.48 ** _{\Delta \Delta}	18.00±12.18*	3.14±3.07 ^{**} △△ [▲]	2.33±2.01**	
6 months	51	28.76±23.51* * _{\Delta \Delta \}	11.35±9.41 ** _{△△} ▲▲	15.88±12.46*	2.76±3.06 ^{**} △△ [▲]	1.94±2.09 ^{**} _{△△} ▲ ▲	

Notes: compare with "before treatment", *P<0.05, **P<0.01; compare with "7 days in treatment", ^P<0.05, ^AP<0.01; compare with "1 month in treatment", ^P<0.05, ^AP<0.01

Table 2: Comparisons of the UPDRS and SIS of 15 PD Patients Who Came for the First Visit

(score, $\Lambda \pm s$)			
Different	Cas	UPDRS	SIS

Time in Treatment	e	Total score	UPDRS II score	UPDRSIII score	Tremor	Myoto nia
Before	15	46.20±15.07	17.80±5.89	26.20±7.43	7.00±1.78	3.67±2 .77
7 days	15	40.20±12.81	15.47±5.07	22.60±6.10	4.67±2.47	2.93±1 .71
1 month	15	29.53±8.77** ^Δ	11.47±4.76 ^{**} △	16.67±3.13** ^{ΔΔ}	4.33±2.58	1.93±1 .28*
3 months	15	20.73±7.27** _{△△}	7.47±2.72**△△▲	12.40±4.45**△△▲	2.73±3.13	1.13±1 .13** _{ΔΔ}
6 months	15	17.20±8.97**△△▲	6.33±3.20 ^{**} △△ [▲]	10.13±5.71**△△▲	2.53±3.20 **	0.87±0 .99**△△

Notes: compare with "before treatment", *P<0.05, **P<0.01; compare with "7 days in treatment", △P<0.05, △△P<0.01; compare with "1 month in treatment", △P<0.05, △△P<0.01

Table 3: Comparisons of the UPDRS and SIS of 22 PD Patients with Mild Disease in

Combined Treatment (score, $\overline{X} \pm s$)

Different	Cas	UPDRS				SIS	
Time in Treatment	e	Total score	UPDRS II score	UPDRSIII score	Tremo r	Myoto nia	
Before	22	40.09±12.26	17.18±5.34	22.50±7.05	6.27±3 .92	3.45±1 .74	
7 days	22	37.59±12.03	16.18±5.22	21.00±6.98	4.64±3 .30	3.27±1 .67	
1 month	22	28.50±10.77** ^Δ	11.68±4.45**^^	16.59±6.69** ^Δ	3.86±2 .80*	2.55±1 .37	
3 months	22	21.27±9.97 ^{**} △△	8.82±4.23**^^	12.27±5.90 ^{**} △△▲	2.68±2 .51** ^Δ	1.68±1 .04**△△	
6 months	22	17.82±10.16**△△	7.14±4.17**△△▲	10.55±6.18**△△▲	2.18±2 .36**^^	1.14±1 .08**^^	

Notes: compare with "before treatment", *P<0.05, **P<0.01; compare with "7 days in treatment", △P<0.05, △△P<0.01; compare with "1 month in treatment", △P<0.05, △△P<0.01

Table 4: Comparisons of the UPDRS and SIS of 14 PD Patients with Severe Disease in

Combined Treatment (score, $\overline{X} \pm s$)

Different	Cas	UPDRS			SIS	
Time in Treatment	e	Total score	UPDRS II score	UPDRSIII score	Tremor	Myotoni a
Before	14	83.57±8.92	33.64±4.63	43.14±6.13	8.43±3. 92	6.07±1.
7 days	14	80.93±9.34	32.36±4.83	41.79±6.18	6.21±3. 21	6.07±1. 38
1 month	14	70.57±19.36*	27.93±8.69*	37.00±10.71	5.79±3. 38	5.43±1. 91
3 months	14	62.79±22.50** _{ΔΔ}	24.79±9.74** ^Δ	33.00±12.62 [*] △	4.29±3. 69**	4.64±2. 06 [*] △
6 months	14	58.36±23.91**^	23.36±9.34** ^{ΔΔ}	30.43±13.65** ^{ΔΔ}	3.93±3. 71**	4.36±2. 27 [*] △

Notes: compare with "before treatment", *P<0.05, **P<0.01; compare with "7 days in treatment", ^P<0.05, ^AP<0.01

2.4 Comparisons of the UPDRS and SIS of 22 PD Patients with Mild Disease in Combined Treatment

The clinical symptoms of 20 cases from the 22 patients with mild disease in combined treatment were effectively improved. After 6 months' treatment, the Improvement Rate (IR) of the total score in UPDRS of the patients is 55.55%; the IR of UPDRS II score is 58.44%; the IR of UPDRS III score is 53.11%; the IR of SIS for Tremor is 65.23%; and the IR of SIS for Myotonia is 66.96%. Table 3 shows that after 7 days' treatment, the total score of UPDRS, UPDRS II and UPDRS III scores, and SIS for tremor and myotonia were all lowered, but the difference was not statistically significant (P>0.05). After one month's treatment, all scores were obviously lowered. And the longer the treatment was, the more obviously the scores lowered. The difference was statistically significant (P<0.05 or P<0.01).

2.5 Comparisons of the UPDRS and SIS of 14 PD Patients with Severe Disease in Combined Treatment

The clinical symptoms of 9 cases from the 14 patients with severe disease in combined treatment were effectively improved. After 6 months' treatment, the Improvement Rate (IR) of the total score in UPDRS of the patients is 30.17%; the IR of UPDRS II score is 30.56%; the IR of UPDRS III score is 29.46%; the IR of SIS for Tremor is 53.38%; and the IR of SIS for Myotonia is 28.17%. Table 4 shows that after 7 days' treatment, the total score of UPDRS, UPDRS II and UPDRS III scores, and SIS for tremor and myotonia were all lowered, but the difference was not statistically significant (P>0.05). After one month's treatment, the total score of UPDRS and UPDRS II score were all obviously lowered. The difference was statistically significant (P<0.05). The difference in the other scores was not statistically significant (P>0.05). After 3 and 6 month's treatment, all scores were obviously lowered. The difference was statistically significant (P<0.05 or P<0.01). All scores except SIS for Tremor were obviously lowered after 7 days' treatment (P<0.05 or P<0.01). However, all the differences in each score were not statistically significant (P>0.05) after 1 month, 3 months, and 6 months in the treatment.

2.6 Untoward Reaction

Of the 51 patients, 19 cases (37.25%) ever had xerostomia, 8 cases (15.69%) felt dizzy, 2 cases (3.92%) had blurred vision, and 1 case (1.96%) had hallucination.

Conclusions

On clinical observation, we find that the Chinese medicine Yangjinhua can obviously improve the symptoms of Parkinson's disease. In our clinical research, the clinical symptoms of 13 cases from the 15 patients who came for the first visit and were administered Yangjinhua Powder Capsule only were effectively improved. The total score in UPDRS was slightly improved just after 7 days treatment and the SIS for Tremor was obviously lowered. The longer the treatment was, the more obviously the symptoms improved, especially for the Myotonia. We found that the clinical symptoms of 20 cases from 22 patients with mild disease in combined treatment were effectively improved. After 6 months' treatment, the symptoms of tremor and myotonia were both improved obviously. The clinical symptoms of 9 cases from the 14 patients with severe disease in combined treatment were effectively improved. After 7 days in the treatment, the total score in UPDRS changed not obviously. Then all the symptoms started to improve after 3 months' treatment. The improvement about symptom of tremor was remarkable after 6 months' treatment.

In view of the above, we find the features of the treatment for PD by Yangjinhua Powder Capsule as follows.

- ① Being used independently, the treatment has rapid onset and remarkable curative effect on the PD patients who never took any medicine before. It can obviously dispel the symptoms of tremor and myotonia from the patients. And the curative effect can be kept long as the beginning effect without adding the dosage while the period of medicine-taking extends.
- ② For the patients who took madopar for a long time needing much dosage to make up the effect decline, we added the treatment without stopping using the original medicine. We found that it could improve the time of operation from madopar. And for some patients, the dosage of

[5] QIAN Kejiu, ZHANG Xiaoxian. Preliminary observation of Chinese medicine anesthesia in the treatment of paralysis agitans [J]. Journal of Traditional Chinese Medicine, 1982, 23 (8): 38-39.

Effect of Acupuncture plus Rehabilitation Training on Early-stage Shoulderhand Syndrome due to Ischemic Stroke

Li Honglin¹; Wang Yujue²; Xia Kunpeng²; Ban Weigu²; Xue Yuman²

- 1、No.2 Hospital Affiliated to HeilongjiangUniversity of Traditional Chinese Medicine,Acupuncture Staff Room,Harbin ,China
- 2、No.2 Hospital Affiliated to HeilongjiangUniversity of Traditional Chinese Medicine,Harbin,China

[Abstract] Objective: To observe the clinical effect of acupuncture plus rehabilitation training in treating early-stage shoulder-hand syndrome due to ischemic stroke. Methods: Sixty patients were randomized into an observation group and a control group, 30 in each. The observation group was intervened by acupuncture plus rehabilitation training, and the control group only received rehabilitation training. After 3 treatment courses, the scores of edema degree and visual analogous scale (VAS), and the clinical effect were compared between the two groups. Results: The two groups both obtained significant improvements in edema degree and VAS scores after treatment (P<0.05 or P<0.01). After treatment, it showed marked differences in comparing edema degree and VAS scores between the observation group and the control group (P<0.05). The total effective rate was 93.3% in the observation group, versus 70.0% in the control group, and the difference was statistically significant (P<0.05). Conclusion: The result of acupuncture plus rehabilitation training in treating early-stage shoulder-hand syndrome due to ischemic stroke is superior to rehabilitation training alone.

[Key Words] Reflex Sympathetic Dystrophy; Shoulder Pain; Stroke; Complications; Acupuncture Therapy; Scalp Acupuncture; Rehabilitation

As a type of reflex sympathetic dystrophy (RSD), shoulder-hand syndrome (SHS) is often present in hemiplegia patients due to cerebral stroke. Manifested by pain in shoulder, fingers, and elbow, and swelling of fingers and wrist, SHS can affect the joint function in mild cases, or even cause deformity in severe cases. The incidence rate has reached to 12.5%-74.1%^[1], and it severely influences the living quality of the patients. During recent years, the author has adopted acupuncture plus rehabilitation training in treating the early-stage SHS due to ischemic stroke, and now report as follows.

1 Clinical Data

1.1 Diagnostic criteria

It was referred to the diagnostic criteria of cerebral infarction in the "Diagnostic Points of Various Cerebrovascular Diseases" stipulated in the 4th China Academic Conference for Cerebrovascular Diseases.

The diagnosis of SHS was based on the criteria made by Miao HS from ChinaRehabilitationResearchCenter^[2]: the patient has neurological disease, with pain in one shoulder, reddish skin, increased skin temperature, as well as limited movement of fingers, but in absence of trauma, inflammation, and peripheral vascular diseases.

1.2 Inclusion criteria

(1) Conformed with the diagnostic criteria of cerebral infarction and SHS, and confirmed by head CT or MRI; (2) during the recovery stage of cerebral infarction, accompanied by SHS of stage

madopar-taking didn't need adding, even could be reduced, while the period of medicine-taking extends. The symptom could still get continuous improvement without adding the dosage of Yangjinhua Powder Capsule.

- ③ For the patients who took levodopa remedy for a long time and suffered from obvious "Wearing Off (End of Dose)" phenomenon, "On-Off" phenomenon and dyskinesia, the adding of the treatment by Yangjinhua Powder Capsule could effectively control the fluctuation of symptom. And the drugs effects could keep long time. While the period of medicine-taking extended, neither dosage of the levodopa or Yangjinhua Powder Capsule needed adding, and the fluctuation of symptom didn't appear.
- ④ The treatment by Yangjinhua Powder Capsule had certain effect on a part of PD patients with severe disease. The patients had nice tolerance to the capsule but got the effect relatively slowly.
- ⑤ The curative effect after the treatment by Yangjinhua Powder Capsule was not obvious for the patients with severe disease who took combined medication for years.

The plant Yangjinhua is deleterious, so cardioacceleration, elevation of blood pressure, mydriasis, urine retention, and obvious xerostomia will appear by overdosing Yangjinhua Powder Capsule. Several patients would have atropine-like excitement symptoms of hallucinations and even delirium^[5]. Therefore we adopted small dose method in our research — each patient took orally 1 capsule (0.25g) before sleep in the evening, or half a capsule (0.125g) in the morning and half in the evening.

Of the 51 clinical cases, 29 patients ever slightly had xerostomia, dizziness and blurred vision. They could adapt to those after short period of treatment. 1 patient had obvious hallucination for overdosing the medicine once with 5 capsules. So, the treatment to PD by taking single medicinal Yangjinhua in small dose is safe and effective.

The treatment to PD by taking Yangjinhua monomer is mainly on clinical research nowadays. We proved that the pure application of Yangjinhua Powder Capsule could control the PD symptoms in early stage effectively. Long period of treatment to PD without increasing the dose could still work effectively; and no toxic or side effects similar to western medicine were found. The research establishes a certain foundation for long term treatment and effective controlling of Parkinson's disease. However, the exactly effective constituent of the Chinese medicine Yangjinhua (Flos Daturae) needs identifying and further studying so that the mechanism of action of treating Parkinson's disease with Yangjinhua monomer can be inquired at a deeper level.

Reference

- [1] SHI Yuquan, ZHOU Xiaoda, LV Chuanzhen. Practical Neurology (3rd edition) [M]. Shanghai: Shanghai science and technology publishing house, 2004:1035-1036.
- [2] Joehn GN, Juhr PH, Stephen TG. Parkinson's Disease (100 Maxims) [M]. London: Edwanl Arndd, 1992:74-75.
- [3] Neurology branch of Chinese Medical Association movement disorders and Parkinson's disease study group. The Diagnosis of Parkinson's Disease [J]. Chinese Journal of Neurology, 2006, 39 (6): 408-409.
- [4] Marinus J, Visser M, Satiggelbout A, et al. A short scale for the assessment of motor impairments and disabilities in Parkinson's disease: the SPES/SCOPA [J]. J Neurol Neurosurg Psychiatry, 2004, 75 (3): 388-395.