

Technological Background

Chronic diseases plague many people, causing the a high death toll and medical cost. Chronic diseases can be attributed to miscellaneous origins that are often unidentified, therefore, often, prescribed disease specific pharmaceuticals are ineffective in treating the chronic diseases or conditions. Chronic diseases require long-term (often life-long) medication therapy, which can cause adverse reactions, related toxicity and side effects. For instance, Vioxx, developed by Merck & Co., Inc. for treatment of arthralgia, claims 60 thousand lives worldwide, outnumbering death toll of Americans in the Viet Nam War. Annually there are around one million people who die of adverse events of medications in the world. In China, about 190 thousand people die of adverse events of drugs annually, ten times higher than that die of major infectious diseases (see *Foreword for Prevention and Control of Adverse Events*, 2002 edition, People's Medical Publishing House).

In an effort to reduce or alleviate increasing adverse effects of medications, some non-medication therapies and Complementary and Alternative medicines (CAM) have become very popular in many developed nations such as U.S., Canada, Japan, Korea and various European countries. However, current CAM procedures have many pitfalls, including difficulty to replicate in practice (depends largely on ability of practitioner,) less regulation and adherence to the regulation, leading to a wide variety of effectiveness, high cost, and painful processes that are not desirable to the patient. To remedy these situations CAM requires new techniques and instruments. In recent decades, instruments of rehabilitative CAM have been introduced, outnumbering those intended for diagnosis (see *China Medical Machines*, 2001, volume 7, page 46).

Most recently invented and utilized medical machines/equipment for CAM treatment purposes require some form of energy or power (usually electricity, battery). Their scope covers the following: radiological therapy, microwave therapy, radiofrequency therapy, ultrasound therapy, laser therapy, millimeter wave therapy, infrared therapy. Other instruments apply sound, light, electricity, magnetic, mechanics and even medication. The machines and instruments risk harm to the human physiology, with such risks including: electric shock, power surges, energy distraction, explosion, fire danger, abnormal performance, power failures, mechanical failure, along with the risk of malpractice, bacterial contamination and interference with other machines (see *China Medical Machines*, V01, 17 No 1). Passive medical machines are often non-invasive and would be the most desirable treatment methodology because they do not require needles, electricity, electricity-mechanic parts or radioactivity. The challenge and/or opportunity here is that very few medical machines and instruments with a non-invasive and a proven rehabilitative effect on chronic diseases have been invented, produced or made popular globally to date. .

Evident effects

This invention (Health Recovery Chips – HRC) offers a new technology for rehabilitation of chronic diseases called **surface therapy technology**, which can play a versatile role mimicking acupuncture and moxibustion, massage, manipulation, scraping, fire cup, herbal plaster, electricity therapy, magnetic therapy, infrared therapy, far infrared therapy, herbal remedies, Qigong, or India Yoga. It can also relieve people from the exhaustion brought on by long-term chemotherapy. It is a highly effective product and process for rehabilitating chronic diseases. In fact, the product/process/concept can reduce reliance on any of the above treatments over time, often significantly (noting that practical application is much easier, safer and can be much more effective than most other CAM's.)

The inventor, together with physician Liu Yu, applied this rehabilitation chip to 590 patients that were plagued by 21 classifications of chronic disease in 6 hospitals in China.

Overall, of the 590 patients, 276 were men and 314 were women. The youngest was 8 years old and the oldest was 85. The longest therapeutic course lasted 35 days and the shortest course was conducted and completed in one day.

Diseases that were treated with the HRC chip involved 21 categories of maladies: headache, chronic rhinitis, coronary diseases, hypertension, arteriosclerotic brain disease, premature beat, slipped disk, cervical hyperosteogeny, gonitis, scapulohumeral peri-arthritis, gout, acute lumbar sprain, cyclomastopathy, insomnia, infection in upper respiratory tract, chronic bronchitis, facial palsy, eczema, acute urinary tract infection, acute gastro-enteritis and toothache.

Outcomes of the therapy with this chip

Up to 91 patients were cured, falling into the following categories: 1. Headache: 12 patients. (Acupoints: Yintang, Fengchi, Yongquan, Hegu, Neiguan, Taiyang, Ashixue) ; 2. Infection in upper respiratory tract: 15 patients (Acupoints: Dazhui, Waiguan, Lieque, Quchi) ; 3. Chronic bronchitis 4 (Acupoints: Yingxiang, Yintang, Hegu, Lieque, Zusanli, Feishu) ; 4. Gout: 2 patients (Acupoints: Sanyinjiao, Taixi, Zusanli, Ganshu, Shenshu, Ashixue) ; 5. Toothache: 10 patients (Acupoints: Xiaguan, Jiache, Fengchi, Taiyang, Ashixue) ; 6. Gonitis: 5 patients (Acupoints: Hedong, Dubi, Qiyan, Yinlingquan, Zusanli, Weizhong, Ashixue) ; 7. Insomnia: 5 patients (Acupoints: Dazhui, Anmian, Fengchi, Neiguan) ; 8. Eczema: 1 patient (Acupoints: Quchi, Neiguan, Xuehai, Fengshi, Zusanli, Sanyinjiao) ; 9. Acute gastro-enteritis: 6 patients (Acupoints: Shangwan, Zhongwan, Zusanli, 4 acupoints around navel, Ashixue) ; 10. Acute lumbar sprain: 1 patient (Acupoints: Shenshu, Weizhong, Sanyinjiao, Ashixue) ; 11. Chronic bronchitis: 3 patients (Acupoints: Dazhui, Tiantu, Renying, Feishu, Neiguan, Dingchuan, Shanzhong, Zusanli, Chize) ; 12. Scapulohumeral periarthritis: 5 patients (Acupoints: Rushu, Jianjing, Jianliao, Jianyu) ; 13. Cyclomastopathy: 1 patient (Acupoints: Shanzhong, Rugen, Wuyi, Ganshu, Pishu, Sanyinjiao) ; 14. Facial palsy: 1 patient (Acupoints: Dazhui, Taiyang, Sibai, Shanguan, Xiaguan, Dicang, Jiache, Juliao) ; 15. Ischialgia: 20 patients (Acupoints: Shenshu, Baihuanshu, Zhibian, Huantiao, Chengfu, Yinmen, Weizhong, Sanyinjiao) .

Up to 455 patients showed some certain effectiveness, and 20 patients showed no improvement in their diseases. (Mostly were due to situations that were too severe or they were unable to persist in the therapy for some reason).

Follow up trials conducted after two months on 590 patients, who were patients of six hospitals, showed that the cure rate was 16%, effectiveness rate was 77% and total effectiveness rate was 93%.

Definitions:

- 1) Cured** – Disease treated and all symptoms disappeared.
Disease has been put into remission.
- 2) Effective – Significantly:** – Disease treated and patients felt notably/significantly better
- 3) Effective – Moderately** – Disease treated and patients show no symptomatic improvement

EXAMPLE – INSOMNIA – patients may come into the clinical research with having the disease for varied periods of time, but the CURE definition denotes that the symptoms have been put in remission. The symptoms may appear again, but for now, we have amazingly removed the symptoms entirely (cured) or significantly (effective) with treatment of the Health Recovery Chips.

The **HEALTH RECOVERY CHIPS** are already being used in many Chinese hospitals today (beginning in April 2005) in an effort to treat chronic diseases. The following outlines the clinical report and detailed information about the trials in the hospitals.

The inventor, in cooperation with physicians of Guangdong Shanwei Hospital of Traditional Chinese Medicine, treated dizziness with the HEALTH RECOVERY CHIPS. The therapeutic effect was very evident.

1. Details of clinical data:

Of the 54 patients, 24 were outpatients and 30 were inpatients. 21 were men and 33 were women. The youngest patient was 17 years old and the oldest was 87. The average age was 50. The shortest disease course (period that patient had been suffering dizziness) previous to treatment was 0.5 day and the longest disease course was 21 years, with the average disease course being 2.2 years. Twenty Five patients were suffering brain arteriosclerosis (results obtained from hospital diagnosis), 10 were suffering hypertension, 8 were suffering cervical spondylopathy, 14 were suffering Meniere's syndrome , 2 were suffering climacteric syndrome , 3 were suffering hyperviscosity syndrome, 2 were suffering neurasthenia , 1 was victim of brain trauma residue, 2 were suffering chronic alcoholism. All of the 54 patients had the principal symptom of dizziness.

2. Treatment details:

All **54 patients underwent treatment** with rehabilitation chip.

Master acupoints: - Baihui , Taiyang , Neiguan , Zusanli.

Secondary points - Taixi and Shenshu in case of deficiency in kidney Yin;
- Geshu and Pishu in case of deficiency in Qi and blood;
add Fenglong and Pishu in case of stagnation of

phlegm-dampness; add Taichong and Fengchi in case of Excess of Liver Yang.

Procedure:

Apply the chip onto master acupoints and match them with accessory acupoints according to syndrome differentiation. Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy.

3. Treatment outcomes:

Of the 54 patients, 14 were clinically cured (The patient's symptom disappeared completely enabling them to return to normal life activities) ; 38 patients had noticeable and significant symptomatic relief (The patient's symptom was obviously alleviated) ; 2 patients showed no improvement effects (symptoms persisted). Total effective rate was 96.2% and average treatment duration was 18 days.

In addition to the preceding maladies, the inventor, in cooperation with physicians of Guangdong Shanwei Hospital for Traditional Chinese Medicine treated stroke patients with the HEALTH RECOVERY CHIPS who had a experienced at least one stroke . The therapeutic effect was significant and convincing.

1. Details of clinical data:

Of the 50 patients, 38 were men and 12 were women. The youngest patient was 33 years old and the oldest was 76. Forty six patients had a disease course shorter than 3 months and 4 longer than 3 months. 30 were suffering sanguineous apoplexy and 20 were suffering cerebral embolism. The average disease course was 5 years.

2. Treatment details:

Master acupoints: - Shuigou, Neiguan, Laogong, Quchi, Weizhong.

Secondary points:

- Jianyu, Hegu, Waiguan, Huantiao, Yanglingquan, Zusanli, Jiexi, Kunlun, Taichong in case of hemi paralysis
- Dicang or Jiache, Hegu, Neiting, Chengqi, Yangbai, Cuanzhu, Kunlun, Yanglao in case of facial hemi paralysis
- Lianquan, Tongli, Yamen, Fengfu, Tiantu, and Sanyinjiao in case of slurred speech

Procedure:

Apply the chip onto master acupoints and match them with accessory acupoints according to syndrome differentiation. Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy.

Each session of therapy uses 4-5 acupoints and alternates the acupoints. Once daily and ten sessions make up one therapeutic course. A two-day interval is needed before administering next 10 session therapy.

Criteria for determining effectiveness

Cure: speak articulately, walk without need of support, able to raise upper limbs, use their hands for picking up various articles, live a normal life without the necessity of nursing care, and improved overall demeanor/attitude and significant reduction in anxiety

Significantly effective: able to speak relatively articulately, walk with need of support, able to use their hands to pick up various articles but with a frail feeling, lead a life with some (little) nursing care. Patients would experience occasional limb discomfort.

Moderately effective: unable to speak articulately but can be expressed, have some improvement in myodynamia of extremities but have poor rehabilitation in functions, lead a life with nursing care.

No effect: maintain symptoms and signs after therapy.

3. Treatment Outcomes:

17 (34%) patients were cured; 16 (32%) patients showed obvious effectiveness, 12(24%)

patients showed some certain effectiveness, 5 (10%) patients showed no effect. Total effectiveness rate was 90%. At least one therapeutic course was conducted and the longest was 9 therapeutic courses. The average was 3.8 therapeutic courses. For relationship between disease and effectiveness of the chip, see table 1. For relationship between disease course and effectiveness of the chip, see table 2.

Table 1 - Relationship between disease and effectiveness of the chip

	Patients number	Cure(%)	Obvious effectiveness(%)	Some certain effectiveness(%)	No effect(%)
sanguineous apoplexy	30	10 (35)	12(40)	6(18.33)	2(6.67)
Cerebral embolism	20	6 (31.5)	4 (20)	7 (33.5)	3 (15)

Table 2 - Relationship between disease course and effectiveness of the chip

Disease course	Patients number	Cure	Obvious effectiveness	Some certain effectiveness	No effect
1-3 months	46	15	15	12	4
Longer than 3 months	4	1	2	1	

The inventor, in cooperation with physicians of The People's Hospital of Shimen County treated constipation - type irritable bowel syndrome with the HEALTH RECOVERY CHIPS. The therapeutic effect was evident.

1. Details of clinical data:

During Oct. 2004-June 2005, 50 patients with irritable bowel syndrome who attended the digestive sector of the hospital were treated with the chip. All patients underwent lab test with barium meal examination and colonoscopy in order to exclude presence of organic changes in either intestinal or entire body that can lead to constipation. All patients met criteria set by 1998' Rome Convention. 18 were men, 32 were women. The oldest was 63 years old, the youngest was 15, and the average age was 37. The longest disease course was 20 years and the shortest was half a year, the average disease course was 5 years.

2. Treatment details:

The patients fell into two categories of cause: (1) stagnation of the liver-qi and (2) deficiency in both heart and spleen. Symptoms of the syndrome Stagnation of the liver-qi: dry or less dry feces, difficult evacuation, infrequent evacuation less than 3 times each week or even worse, as few as one bowel movement per week. Other symptoms include abdominal flatulence, side pains in stomach area (one or both sides), a bitter taste in mouth, dizziness, and moodiness (fluctuation in patient's mood ranging from calm, to anxiousness, anger, sadness, depression or panic – similar to menopausal symptoms). Furthermore, the tongue texture is pale with a thin, white coating Patient's pulse would be

described as faint and weak.

Among 50 patients, 21 met criteria for stagnation of the liver-qi , accounting for 42% and 29 met criteria for deficiency in both heart and spleen, accounting for 58%.

1.3 About treatment

All patients underwent psychological counseling providing relief from anxiety and depression, along with a dietary adjustment of more plant fibers. They are also informed of rational habits of feces evacuation as having bowel movement at a certain time, the problems of smoking or reading during bowel movement. All medications either chemical or herbal were stopped. On the basis of the preceding activities, the patients received treatment with rehabilitation chip according to syndrome differentiation.

The master acupoints were bilateral Dachangshu, Zusanli and Zhongwan. For stagnation of the liver-qi, add bilateral Yanglingquan and Xiangjian with a dispelling maneuver (Xiefa). For deficiency in both heart and spleen, add bilateral Sanyinjiao and Guanyuan.

Procedure:

Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy. Once daily and ten days make up one therapeutic course.

A two-day interval is needed between every two sessions. One episode of observation lasted two months.

Criteria for determining effectiveness and results

Cured:	Symptoms disappear, restore normal bowel movement without relapse within two months.
Significantly effective:	Some certain effectiveness: symptoms are strikingly alleviated, restore relatively normal bowel movement without relapse within two months
Moderately effective:	n/a
No effect:	maintain unchanged after therapy or have to resort to medication therapy.

3. Treatment Outcomes:

Among 21 patients with stagnation of the liver-qi, 15 patients showed obvious effectiveness, 4 patients showed some certain effectiveness, 2 patients showed no effect. Among 29 patients with deficiency in both heart and spleen, 16 showed obvious effectiveness, 9 showed some certain effectiveness, and 4 showed no effect. Regardless of syndrome differentiation, overall rate of obvious effectiveness was 61% (31 patients), rate of no effect was 12% (6 patients), and general effectiveness rate was 88%.

III. The inventor, in cooperation with physicians of The Hospital for Traditional Chinese Medicine of Changde City treated hypertension with the HEALTH RECOVERY CHIPS. The therapeutic effect was evident and significant.

1. Details of clinical data:

Among 76 patients, 41 were men, 35 were women. One patient was younger than 45, 23 were between 45 and 55 years old, and 42 were older than 55. The shortest disease course was half year and the longest was 9 years. Criteria for classifying hypertension were set by 1978' national conference on cardiovascular diseases and WHO as well. 12 patients were in stage I (mild – high blood and non-symptomatic), 47 patients were in stage II (moderate – high blood pressure and symptomatic) and 7 patients were in stage III (severe - high blood pressure – high blood pressure, along with involvement with other body organs/functions and highly symptomatic).

2. About treatment:

Acupoints applied: Dazhui, Neiguan, Jianguaxue, Taichong, Hegu, Fengchi (all were bilateral) , Ganshu and Baihui.

Procedure: Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with) adhesive tape. Retain the chip on

acupoints for one hour each session of therapy. Each session of therapy uses 4-5 acupoints and alternates the acupoints. Once daily and ten sessions make up one therapeutic course. During the therapy, patients were asked to refrain from smoking and alcohol (note- this request was specific to this treatment only, which used only the HRC's and no needles) and stay as relaxed as free from stressful situations in as much as possible, maintain regular evacuation of urine and feces , and most notably, stop any and all other therapies including medication.

(for hypertension – follow up was recommended because of the nature of the ailment and the ease in which it could return. The follow up length and course also depended somewhat on which hospital conducting the clinical therapy and study.)

Posterior to treatment of 76 patients for half a year, 47 were cured (for at least 6 months which was the follow up period): headache and dizziness disappeared, blood pressure returned to normal level, did not relapse within half a year on follow-up; 18 patients showed obvious effectiveness: headache and dizziness disappeared, blood pressure returned to normal level, but relapsed within half a year on follow-up. 6 patients showed some certain effectiveness: headache and dizziness remitted, but blood pressure fluctuated between normal level and cut point; 5 patients showed no effect: blood pressure did not return to normal level or failed to restore normal range even occasionally symptoms remitted. General effectiveness rate was 92% , and cure rate was 71% .

The inventor, in cooperation with physicians of No. 1 Hospital for Traditional Chinese Medicine of Changde City treated coronary disease with the HEALTH RECOVERY CHIPS.

1. Details of clinical data:

Among 50 patients , 37 were men, 13 were women. The oldest was 76 years old, the youngest was 23. 8 patients were between 40-49 years old, 20 were between 50-59, 16 were between 60-69, 3 were between 70-79. According to criteria set by western medicine, 17 patients were suffering angina pectoris, including 16 with stable angina pectoris, one with unstable angina pectoris; 15 were suffering arrhythmia, including 10 patients with ventricular premature beat, 2 with atrial premature beat, one with sick sinus syndrome, one with atrial fibrillation, one with complete right bundle block; 9 were suffering myocardial infarct, and 11 were with remote myocardial infarction. According to criteria set by traditional Chinese medicine, 13 belonged to blood stasis, 11 belonged to obstruction by phlegm, 8 belonged to stagnation of qi, 7 belonged to deficiency in heart-qi, 11 belonged to deficiency in both qi and yin, and 5 belonged to deficiency in heart-yang.

2. Treatment details:

Master acupoints: Principally from heart and pericardium channel, matched with acupoints that were crisscross of eight channels as well as the

Xi-points that belong to heart and pericardium. First group: Jujue, Xinshu, Geshu, Neiguan, Gongsun and Yinxi; second group: Shanzhong, Jueyinshu, Sanyinjiao and Ximen. Alternate the two groups.

Secondary points: Add Taiyuan in case of obstruction by phlegm, add Shanzhong or Geshu in case of asthenic cold.

Procedure:

Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy. Once daily and ten sessions make up one therapeutic course. An observation session consisted of 3 therapeutic courses.

Criteria for determining effectiveness

1. Criteria for determining effectiveness over treating angina pectoris and illustrated by ECG: 1979' national Criteria for Evaluating Effectiveness over Treating Angina Pectoris and Illustrated by ECG; 2. Criteria for determining effectiveness over main symptoms (choked pain, palpitation and short breath): obvious effectiveness: symptoms disappear utterly or almost utterly; Alleviated: symptoms become obviously alleviated; no effect: symptoms remain unchanged after therapy; deteriorated: symptoms become deteriorated after therapy. 3. Criteria for determining effectiveness over index of blood fat was according to 1974/ Shanghai Panel for Cooperation on study of red sage root compound.

3. Treatment Outcomes:

- ① Effectiveness over main symptoms (see Table 1)
- ② Effectiveness over syndrome differentiation of TCM (see Table 2)
- ③ Effectiveness over index of blood fat: there were 30 patients who had over high cholesterol and 23 of them showed effectiveness; there were 20 patients had over high TG and 10 of them showed effectiveness.

Table 1 Effectiveness over main symptoms

main symptoms	Number of patient	obvious effectiveness	Alleviated	No effect	Deteriorated	Effectiveness rate(%)
Chest pain	30	20	6	2	2	86.66
Choked chest	32	12	16	4	0	87.50
Palpitation	23	10	8	5	0	78
Short breath	13	5	7	1	0	92

Table 2 Effectiveness over syndrome differentiation of TCM

Main symptoms	Number of patient	obvious effectiveness	Alleviated	No effect
blood stasis	13	8	4	1
obstruction by phlegm	11	5	5	1
stagnation of qi	8	2	4	2
deficiency in heart-qi	7	3	3	1
deficiency in both qi and yin	6	3	2	1
deficiency in heart-yang.	5	2	2	1

④ Effectiveness over changes on ECG: all disorders on ECG were alleviated, including ST-T alterations, V-wave alteration, atrial fibrillation, sick sinus syndrome, frequent ventricular premature beat, frequent atrial premature, and complete right bundle block.

⑤ Effectiveness over cardiac function: all disorders in cardiac function were alleviated,

with LVET elongate, PEP and TICT shortened, and PEP/LVET dropped.

The inventor in cooperation with physicians Meili and Liu Guang treated senile dementia (brain function decline) with the HEALTH RECOVERY CHIPS.

1. Details of clinical data:

Among 76 patients, 46 were men and 30 were women. The patients were between 59-78 years old with an average age of 73. Their disease courses lasted 9 months to 8 years, with an average of two years and eight months.

2. Treatment details

Master Acupoints: Baihui, Sishencong, Dazhui, Guanyuan.

Secondary points: None

Procedure:

Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy. Once daily and ten sessions make up one therapeutic course.

A two-day interval is needed before administering next therapy course. A usual duration of therapy was 2-3 months. Patients were allowed to use other medications during using this chip therapy (for this group, medication was allowed due to the nature of the malady). This group of patients were in general, older and could have a variety of related ailments such as high blood pressure, high cholesterol, diabetes, etc, and because the treatment was specific to senile dementia, not on the other maladies. Hence, the medication used in treating the variety of ailments was allowed to be continued including hypertension relieving pills, fat-reducing medications, sugar-reducing medications and medications that inhibited agglomeration of blood platelet.

2. Treatment details:

Criteria for determining effectiveness

Cure:	symptoms disappear, lead a life without nursing care (note – all patients with this disease/malady came into the study were under nursing care, and returned to normal social activities)
Effective – Significantly	symptoms become alleviated, but still suffer slow or retarded reactions, intelligence, still requiring nursing care
No effect:	remain unchanged in symptoms and signs after therapy.

3. Treatment Outcomes

7 patients were cured, 33 showed obvious effectiveness; 26 patients showed some certain effectiveness; 10 patients showed no effect. Of those 19 patients who had disease course shorter than one year, 6 were cured, 9 showed obvious effectiveness. All patients that showed no effect had a disease course longer than 3 years. The effectiveness rate was 86%.

The inventor in cooperation with physician Tang Guanghua treated chronic enteritis with the HEALTH RECOVERY CHIPS.

1. Details of clinical data:

Among 64 patients, 38 were men, 26 were women. 8 patients were between 30-40 years old, 18 were between 41-50, 26 were between 51-60, and 12 were older than 61. The shortest disease course was one year and the longest was 12 years.

Criteria for confirming chronic enteritis: ① history of acute enteritis or recurrence of enteritis; ② Upon onset of enteritis, patients suffered from diarrhea and abdominal pain, accompanied by chronic malnutrition and abdominal tenderness. Routine stool test showed white blood cells and few pyocytes. ③ Being excluded from other non-specific enteritis using X-ray barium meal examination and colonoscopy.

2. Treatment details:

Master acupoints: four acupoints around navel, Zhongwan, Tianshu, Guanyuan, Zusanli, Shangjuxu, Shenshu, Pishu, Dachangshu, Quchi, Sanyinjiao.

The preceding acupoints fell into two groups:

First group: four acupoints around navel, Zhongwan, Tianshu, Guanyuan, Zusanli, Shangjuxu, Hegu and Sanyinjiao.

Second group: Pishu, Shenshu, Dachangshu, Zusanli, Shangjuxu, Hegu. Alternate the two groups upon using.

Secondary Points: None

Procedure:

Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy.

Use 4-5 acupoints each session. Ten sessions make up one therapeutic course.

3. Treatment Outcomes:

Criteria for determining effectiveness

Cure: stool restores normal shape, being evacuated once daily.

Effective - Significant stool restores normal shape, being evacuated twice daily;

No effect: stool remain unchanged.

Among 64 patients, 31 patients were cured, accounting for 48.4%; 28 patients were alleviated, accounting for 43.7%; 5 patients showed no effect, accounting for 7.9%.

General effectiveness rate was 92.1%.

The inventor, in cooperation with physicians of The People's Hospital of Tianjin City treated chronic prostatitis with the HEALTH RECOVERY CHIPS.

1. Details of clinical data:

All 68 patients were attendants to the hospital during June 2004-June 2005, most of them had undergone treatment using either chemical or herbal medications. The youngest patient was 17 years old and the oldest was 76. 3 patients were younger than 20. 5 patients were between 21-30 years old, 8 were between 31-40, 17 were between 41-50, and 35 patients were older than 50. The shortest disease course was half a year and the longest was 20 years. 57 patients were married, 11 were unmarried. Main complaints included sore and swelling pain in back and bottom, bearing down pain in lower abdomen and perineum, frequent urination, difficult urination, dripping urination. 6 patients were complicated with severe nervosism and sexual disorder. Examination of prostatic fluid under microscopy: 28 patients showed white blood cells in the prostate fluid, presence of which indicates abnormality. White blood cell count indicates problematic inflammation and disease. Normal prostate would have no white blood cell count. (+) (lab data – 1 cubic ml), 21 patients showed white blood cells (+ +), 15 patients showed white blood cells (+ + +), 4 patients showed white blood cells (+ + + +). 32 patients had prostatomegaly, and 2 patients had calculus of prostate.

2. Treatment Details

Master acupoints: Xiaochangshu, Pangguangshu, Pishu, Ciliao, Guanyuan, Zhongji.

Secondary points: Yinlingquan, Sanyinjiao, Taixi. For excess of viscera, add Qugu, Waigua; for deficiency of viscera, add Shenshu, Zusanli.

Procedure:

Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy.

Each session of therapy uses 4-5 acupoints and alternates the acupoints. Once daily and ten sessions make up one therapeutic course. A 3-5 days rest interval is needed before administering next therapy.

In case both acupoints and Mu(collecting) points are used, put the needle prone (front of body) position first and supine (back of the body) position second. More frequently only one position is used upon each session with alternating prone one day and supine the next in the course of the 10 session treatment.

Criteria for determining effectiveness

Cure: self-felt symptoms disappear, restore normal examination of prostatic fluid under microscopy;

Effective – significant: symptoms disappear, less than 3 WBC/HP are found;
alleviated: symptoms become alleviated obviously, 4-6 WBC/HP (white blood cell count per high magnification) prostate fluid sample HP

No effect: symptoms and findings under microscopy remain unchanged.

3. Treatment Outcomes:

Posterior to 2-3 therapeutic courses, 18 patients were cured, accounting for 26.5%; 21 patients showed obvious effectiveness, accounting for 30.9%; 22 patients alleviate their symptoms, accounting for 32.3%; 7 patients showed no effect, accounting for 10.3%.

General effectiveness rate was 89.7%

For effectiveness varying with age segments, see Table 1

Table 1 Effectiveness varying with age segments

Age (years)	Number of patient	cure	Obvious effectiveness	Alleviated	No effect	Effectiveness rate (%)
17-20	3	1	2	-	-	-
21-30	5	3	1	1	-	-
31-40	8	4	2	2	-	-
41-50	17	6	7	3	1	94.1
50-76	35	4	9	16	6	82.9

The inventor in cooperation with physicians of NO. 1 affiliated Hospital of Guiyang College for Traditional Chinese Medicine treated chronic nephritis and nephrosis with the HEALTH RECOVERY CHIPS.

1. Details of clinical data:

52 patients were randomized - total of 99 patients had 2 kidney problems, either kidney inflammation or kidney fissure (function decline syndrome) – 52 patients were treated with the chips, while 47 patients were treated with medicine into group treated with the chip and the other 47 patients into group treated with medication as control. CGN fell into ordinary type, manifesting slow onset, protracted disease course, having little or much proteinuria, hematuria, cylindruria, edema, hypertension, and renal failure; hypertension type, besides preceding findings, this type is striking for very high blood pressure; type of flare in course of chronic plaguing: manifesting features of acute nephritis in course of chronic plaguing. NS was always accompanied by large amount of proteinuria (\geq 3.5g/24h) , hypoproteinemia (serum albumin<30g/L) , hyperlipemia and explicit edema. All patients were classified into certain types according to 1985 national conference on diseases of glomerulus (Nanjing). Some underwent renal biopsy for pathological classification.

Group treated with rehabilitation chip included: 20 patients with ordinary type of CGN, 12 patients with type of flare in course of chronic plaguing, 5 patients with striking hypertension. Group treated with medication as control included: 18patients with ordinary type of CGN; 12 patients with type of flare in course of chronic plaguing, 4 patients with striking hypertension, and 13 patients with NS.

2. Treatment details:

Master acupoints: Group treated with rehabilitation chip: Shenshu, Panguangshu, Sanjiaoshu, Guanyuan, Qihai, Sanyinjiao, Shuitong, Shenjue, Huiyin, Qugu.

Secondary points: None

Procedure:

Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy.

Each session of therapy uses 4-5 acupoints and alternates the acupoints. Once daily and ten sessions make up one therapeutic course. Patients in this group were also administered routine treatment, that is to say, inosine 0.2g, three times daily.

Liuweidihuang mixture (add or remove some constituents in case of need), use dihydrochlorothiazide to treat edema and remove retention of water, use nifedipine and captopril to relieve hypertension. The control group only received the routine treatment.

Criteria for determining effectiveness:

Parameters for observing effectiveness:

Routine urine test, quantitative measurement of protein in 24h urine, β_2 -MG, urine β_2 -MG, blood routine test, blood creatinine, blood urea nitrogen, complement, Ig and renogram.

Criteria for determining effectiveness

Posterior to therapy, findings of followings indicate effective and based on which

effectiveness rate was calculated: observational measurement of urinary protein was negative, quantitative measurement of protein in 24h urine was $\leq 150\text{mg}$, normal renal function, and normal immunity test. Lowering of blood pressure, decreasing of urine protein and improvement of renal function were not discussed in determining effectiveness.

3. Treatment outcomes:

Posterior to 1-3 therapeutic courses using rehabilitation chip, protein disappeared in urine of 39(75%) patients. 17 out of 20 patients with ordinary type CGN showed effectiveness, 9 out of 12 patients with type of flare in course of chronic plaguing showed effectiveness, one out of 5 patients with striking hypertension showed effectiveness, 12 out of 15 patients with NS showed effectiveness. As for the control group, protein disappeared in urine of 16 (34%) patients. 4 out of 18 patients with ordinary type CGN showed effectiveness, 4 out of 12 patients with type of flare in course of chronic plaguing showed effectiveness, none of 4 patients with striking hypertension showed effectiveness, 8 out of 13 patients with NS showed effectiveness. Biopsy of patients treated with chip showed they mostly featured minute lesions, mild proliferation of mesenteric tissue, and membranate nephrosis. All patients that showed effectiveness had normal value of Cr, Bun, C₃, renogram showed favorable profile. Most patients (> 50%) recovered.

Effectiveness rate between the two groups differed significantly ($u > 2.58$, $P < 0.05$), indicating group treated with chip plus medication was superior to group treated with only medication. Due to scarcity of patients who had undergone biopsy, relationship between pathological type and effectiveness was unable to obtain. However, aftermath of protein in urine was related to pathological classification.

The inventor, in cooperation with physicians of Linli Hospital for Traditional Chinese Medicine treated trigeminal neuralgia with the HEALTH RECOVERY CHIPS.

1. Details of clinical data:

56 patients with trigeminal neuralgia were treated. 20 were men, 36 were women. The oldest was 78 years old, the youngest was 35. 5 patients suffered pain in first branch, 15 in second branch and 16 in third branch. 20 were compounded. The shortest disease course was one month and the longest was 10 years. 48 patients were primary and 8 were secondary. 3 suffered cholesteatoma; 5 suffered eye-branch residual pain due to infection of herpes zoster virus.

2. Treatment details

Master acupoints:

For first branch: Yuyao and Xiaguan were master acupoints, matched with Yangbai, Shangxing, Hegu, Neiting.

For second and third branches: Sibai, Xiaguan, Dicang, Jiachengjiang, Hegu, Neiting. For lesion on head and face, acupoints on pained side were used. Hegu and Neiting were used bilaterally.

Once daily, ten sessions make up one therapeutic course. Rest for 3-5 days before administering next therapeutic course.

3. Criteria for determining effectiveness:

Cured:	pain on face utterly disappears
Effective – significant:	pain on face becomes dramatically infrequent
Effective – moderate:	pain on face become alleviated and infrequent
No effect:	pain on face remain unchanged in severity and frequency after the therapy.

3. Treatment Outcomes

38 patients had orally taken carbamazepine and stopped it due to ineffectiveness. They refrained from carbamazepine during therapeutic course with the chip. 18 patients who had not taken carbamazepine were administered carbamazepine 0.1g bid during their therapeutic course with the chip. The least sessions for using the chip were 6 times and the most were 20 times. 42 were clinically cured, accounting for 75%; 9 patients showed obvious effectiveness, accounting for 16.1%; 5 patients alleviated, accounting for 8.9%; none of the chip-treated showed no effect ; general effectiveness rate was 100%. 42 patients did not relapse within half a year follows, 11 patients relapsed within 3-4 months, however with mild symptoms, and symptoms disappeared for another 5-10 session's therapy with the chip. 3 patients with cholesteatoma were referred to other hospital for operation, lacking data of follow-up.

The inventor, in cooperation with physicians of 302 Hospital of Anshun (government controlled military hospital) treated headaches with the HEALTH RECOVERY CHIP.

1. Details of clinical data:

Of the 120 patients, 39 were men and 81 were women. The youngest patient was 20 years old and the oldest was 70. The shortest disease course was 5 hours and the longest was 20 years.

2. Treatment details:

Master acupoints: were Fengchi, Baihui, matched with other acupoints according to syndrome differentiation.

The patients were clinically classified as: (1) Affection due to external wind: headache occurred upon encountering wind and pain was striking. They were matched with Fengfu, Lieque, Waiguan, Hegu. (2) Liver-yang: pain on one side, may involving top of head. They were matched with Sishencong, Taichong and Shuiquan. (3) Stasis of blood refractory with a pricking pain. They were matched with Sanyinjiao and Ashixue.

Procedure:

Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy.

Once daily and ten sessions make up one therapeutic course. A two-day interval is needed before administering next therapy. Analyze effectiveness after one therapeutic course.

Criteria for determining effectiveness

Cure: pain disappears utterly and does not relapse within half a year

Effective – significant: pain obviously become alleviated and less frequent; some

Effective - moderate: pain become alleviated and less frequent

No effect: pain remains unchanged.

3. Treatment outcomes:

Among 120 patients, 96 patients were cured, accounting for 80%; 18 patients showed obvious effectiveness, accounting for 15%; 6 patients showed some certain effectiveness, accounting for 5%. The effectiveness rate was 100%.

The inventor, in cooperation with physicians of No. 1 Hospital for Traditional Chinese Medicine of Changde City treated gastric or duodenal ulcer with the HEALTH RECOVERY CHIPS. The therapeutic effect was evident.

1. Details of clinical data:

1.1 Selection of patients: All 80 patients met criteria for gastric or duodenal ulcer. They were randomized into two groups. The treatment group had 50 patients. 35 were men and 15 were women, the ages were between 24-62 with an average of 35.5 ± 11.3 . Disease courses were between 0.5-20 years with an average of 6.4 ± 2.8 . 19 patients were suffering gastric ulcer, 26 patients were suffering duodenal ulcer, 5 patients were suffering compound ulcer, 44 patients had negative occult blood in stool, 4 patients had weak positive result and 2 had positive result. The control group had 30 patients. 18 were men and 12 were women, the ages were between 20-68 with an average of 34.4 ± 12.4 . Disease courses were between 4 months-18 years with an average of 6.5 ± 3.0 . 10 patients were suffering gastric ulcer, 13 patients were suffering duodenal ulcer, 7 patients were suffering compound ulcer, 25 patients had negative occult blood in stool, 3 patients had weak positive result and 2 had positive result. Differences between the two groups were tested non-significant using X^2 ($P > 0.05$), being comparable.

2. Treatment details:

For the treatment group: first group: Zusanli, Neiguan, Gongsun; second group: Zhongwan, Pishu, Weishu. Add liangqiu in case of stomach pain; add upper and lower Zhongwan in case of cold in stomach; add Tianshu in case of flatulence; add Taichong in case of sour regurgitation; add Zhigou in case of constipation; add Shenmen in case of insomnia; add Qihai in case of fatigue. Alternate the two grouped acupoints once daily.

Procedure:

Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy.

Once daily and ten sessions make up one therapeutic course. Administer gastroscopy 2 months posterior to therapy with the chip.

For control group, acupoints were taken the same as that of treatment group except for using supplementing or dispelling maneuver. For bleeding ulcers (mild), some medications could be used.

Parameters for observation: ulcer lesion (gastroscopy), and some symptoms (abdominal pain, sour regurgitation) .

Criteria for determining effectiveness (in accordance with Standard for Determining Effectiveness over Diseases Treated with Traditional Chinese Medicine issued in 1994 by

State Administration of Traditional Chinese Medicine of PR China)

Cured:	ulcer lesion heals found by gastroscopy, symptoms disappear
Effective - significant:	ulcer lesion shrink or become scared found by gastroscopy, symptoms disappear or become alleviated;
Effective – moderate:	lesion does not shrink, but congestion and edema in membrane of stomach become alleviated, and symptoms become alleviated
No effect:	ulcer remains unchanged (lesion/symptoms)

3. Treatment outcomes:

For results, see Tables 1, 2.

Table 1 Comparison between two groups over effectiveness

main symptoms	Number of patient	Cure	obvious effectiveness	Alleviated	No effect	General effectiveness rate(%)
Treatment group	50	14	11	21	4	92.0 ¹⁾
Control group	30	6	6	13	5	83.3

Table 2 Comparison between two groups over time consuming upon getting effectiveness

Group	Number of patient	Therapeutic course			
		6	7	8	9
Treatment group	14	2	5	5	2

Control group	6	0	0	2	4
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The inventor, in cooperation with physicians of The People's Hospital of Jinshi County treated vascular headache with the HEALTH RECOVERY CHIPS.

1. Details of clinical data:

Among the 120 patients, 35 were men and 85 were women. The youngest was 18 years old and the oldest was 76. The longest therapeutic course lasted 10 years and the shortest course was one day.

2. About treatment:

Master acupoints: were classified into four groups. The first group: Yintang, Yongquan, Hegu; the second group: Yintang, Fengchi, Zhongwan; the third group: Neiguan, Yifeng, Taiyang.

Secondary points: For headache in full head, add acupoints along hairline; the fourth group: Fengchi, Neiguan, Taiyang, Shuaigu.

Procedure:

Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy.

Once daily and ten days make up one therapeutic course. A two-day interval is needed before every two sessions. Evaluating therapeutic effect after two therapeutic courses.

Criteria for determining effectiveness

Cured: pain disappear and normal life restored, pain does not relapse within half a year follows

Effective - significant: pain disappear and normal life restored, but relapses within half a year follows

Effective - moderate: pain becomes alleviated, but becomes deteriorated in case of tiredness and fretfulness, relapses sometimes:

No effect: pain remains unchanged.

3. Treatment outcomes:

120 patients were cured; 20 patients showed obvious effectiveness; 20 patients showed some certain effectiveness; 12 patients showed no effect 3patients. General effectiveness rate was as high as 97.5%.

The inventor, in cooperation with physician Duan Changjiu treated bronchial asthma with the HEALTH RECOVERY CHIPS.

1. Details of clinical data:

Among the 48 patients, 20 were men and 28 were women. The youngest was 6 years old and the oldest was 65. The longest therapeutic course lasted 27 years and the shortest course was 6 months. 36 patients were due to phlegm-hot, 12 were due to wind-cold.

This disease was mostly due to wax of evil and wane of genuine, manifesting excess of viscera upon onset, either displaying cold or hot features. Symptoms can be short breath and choked chest, wheeze, loud speaking and powerful pulse. For those who are displaying cold features, their sputum was cold and thin complicated by coldness signs; for those who are displaying hot features, they had more expiration and less inspiration, exacerbated by motion. Short breath and fatigue, gloomy complexion and weak pulse. Protracted disease course may hurt spleen and kidney and be complicated with deficiency in both spleen and kidney

2. Details of treatment:

Master acupoints: Neiguan, Tiantu, Dingchuan, Shanzhong, Feishu, Chize, Zusanli, Yuji, Yezui, Lieque. Alternately use 4-5 acupoints.

Secondary points: None

Procedure:

Dip a cotton stick into surface liquid and moisten the contact area on the skin, apply the chip onto the acupoints and immobilize it with poromeric adhesive tape. Retain the chip on acupoints for one hour each session of therapy.

Once daily and ten sessions make up one therapeutic course.

Criteria for determining effectiveness

Cure: symptoms are removed without relapse

Effective – significant: symptoms are removed without relapse within half a year, or occasionally relapse but very slightly, can be relived without anti-asthma medications.

Effective – moderate: symptoms obviously become alleviated, can restore normal life although symptoms may occur here and there, and anti-asthma medications are reduced dramatically.

No effect: symptoms remain unchanged after three therapeutic courses.

3. Treatment outcomes:

15 patients showed obvious effectiveness, accounting for 315; 30 patients showed some

certain effectiveness, accounting for 63%; 3 patients showed no effect, accounting for 6%; general effectiveness rate was 94%.

Table Effectiveness over types of asthma treated with acupuncture

main symptoms	Number of patient	Obvious effectiveness	Alleviated	No effect	General effectiveness rate(%)
Treatment group	36	12(33)	23(64)	1(3)	97
Control group	12	3(25)	7(58)	2(17)	83

Compared to other procedures of CAM, this chip is more effective and enjoys additional advantages as below:

① Free from using needle and medications, free from any side or toxic effect (It is superior to invasive procedures, and meets requirements for non-deleteriousness and environment-friendliness

②Free from using electricity and mechanic parts, free from damage and maintenance. It is better than electricity-mechanic peers.

③Easy use very accessible for self-rehabilitation and household use. Free from maneuver of practitioner, being exempted from poor effect due to inappropriate practice.

④Economical and cheap. This chip can be used personally and can endure repeated uses (as many as ten thousand times), costing only several cents each session of therapy.

