

Effects of Shuwei Decoction on the Distribution of Connexin 43 Protein and the Repair and Regeneration of Interstitial Cells of Cajal in Rats with Functional Dyspepsia

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Shuwei Decoction itself has many functions, not only good for human body, but also has many biological functions. For functional dyspepsia rats, the distribution of connexin 43 protein and the repair and regeneration of interstitial cells of Cajal(RRICC) have different changes in different treatment methods. The purpose of this paper is to study the effect of Shuwei Decoction on the distribution of connexin 43 protein and the RRICC in rats with functional dyspepsia. In order to prove the specific effect of Shuwei Decoction on rats with functional dyspepsia, 50 rats were selected as the research object, and the size of distribution area of Cx43 protein and the cell regeneration were observed. The speed of birth and repair, the distribution of Cx43 protein and the level of Cx43 protein were detected, and the statistical data were studied. The results show that Shuwei decoction can promote the regeneration and formation of ICC, thus obtaining the structural integrity of ICC, improving the potential intestinal disorder and treating FD. Shuwei decoction has a strong effect on the RRICC, which is the result of the increase of the number of intercellular stem cells, and the speed of cell repair and regeneration is increased by nearly 30%. On the basis of the distribution of Cx43 protein, the distribution area increased by 20% compared with the original basis. Therefore, Shuwei decoction has a great influence on the distribution of connexin 43 proteins and the RRICC in rats with functional dyspepsia.

Keywords: Functional Dyspepsia, Connexin 43, Interstitial Cajal, Cell Repair and Regeneration

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Functional rejection is used for the spread of digestive system diseases, clinical time and multiple diseases to stabilize the stomach and the ball, especially the ambassador dinner for ultra-high definition, abdominal swelling, full wound, nausea, vomiting, heartburn, IQI and other symptoms, and combined with the symptoms, try to use iwi to interpret the symptoms of organic, systemic and metabolic diseases. At present, the mechanism of

the disease is still unclear. Modern medicine believes that these mechanisms are related to gastrointestinal dysfunction and hormone dysfunction. It is sensitive to visceral, cluster spiral and psychosocial factors. Results of FD clinical treatment. The double staining technology of immunochemistry and fluorescence chemistry and the regeneration technology of fluorescence dichroism were used.

Cajal cells are the honey of the gastrointestinal tract, which will spread to your gastrointestinal tract and participate in the rhythm of gastrointestinal basic electricity, diffuser and nerve information transmission¹. At the same time, the intestinal nerve distance, smooth ear cell (MMO) stage, and even answer in the form of friends, the best drug network is also broken. For example, the distance moss MMO network regulates the regional mechanism of gastrointestinal motility². Although gastrointestinal activity is closely related to the transmission of cholinergic nerves, recent studies have shown that ICC is closely related to many gastrointestinal diseases. The abnormal and quantitative decrease of gastrointestinal diseases may be the key factor of pathophysiological mechanism, which leads to ft. Decoction for the treatment of acute spleen and liver osteoporosis, clean the air, and take more effective drugs. This experiment is based on the study of digestive decoction of fad rat model, which affects the metabolism of small intestine muscle and gastrointestinal metabolism disorder in mice³.

Many scholars have studied the effect of Shuwei Decoction on functional dyspepsia in rats with gastric disease and the repair and regeneration of interstitial cells (RRIC) in kahal plasma. In this case, Kolasa found that Er - β is the main form of expression of human cardiovascular lava cells, and assumed that Er - β can play a role in the protection of estrogen in cardiovascular tissue. In today's discussion and analysis, it was confirmed that the decoction had an effect on the distribution of Cx43 protein⁴. Yang m found sinus heart tissue, suggesting that ICC can be gastrointestinal cells, and through the study of electrophysiology and cell microstructure development, ICC can be gastrointestinal cells⁵. Manole used small molecule dye injection to observe its diffusion between cells. It was found that there was only a small amount of gap connection between interstitial cells of Cajal (ICC-MP) and circular or longitudinal muscle of small intestinal muscle plexus in dogs. Through research and discussion, it was proved that there might be other connection mechanisms other than gap junction, which participated in the pacing activity

and nerve conduction of gastrointestinal tract⁶. The distribution of the protein was found to be affected by the distribution of the protein by different chemicals. Marchlewska found that there are many factors in the recovery and regeneration of Cajal interstitial cells. In order to prove the fastest material for cell repair and regeneration, Shuwei decoction is of great significance in repairing and regenerating interstitial cells of Cajal⁸.

In the research on the effect of Shuwei Decoction on the distribution of connexin 43 protein and the RRIC in rats with functional dyspepsia, this paper summarized and analyzed a large number of previous research experience and achievements, and made some innovations in the research content and research methods, The specific innovations are as follows: first, ICC forms multiple network connections with the intestinal nervous system of the digestive tract. There are multiple receptors on the ICC membrane of the gastrointestinal tract, which respond to neurotransmitters such as acetylcholine, nitrogen oxide, vasoactive intestinal peptide and substance P-substance, indicating that ICC participates in and transmits nerve signals through ICC gastrointestinal tract. Secondly, the intercellular diffusion of Cajal stromal cells (ICC-MP) was observed by intracellular injection of small molecule dye. It was found that there were only a few gap junctions between ICC-MP and circular or longitudinal muscles.

THE THEORETICAL BASIS OF SHUWEI DECOCTION ON CX43 PROTEIN DISTRIBUTION AND CAJAL MESENCHYMAL CELL REPAIR AND REGENERATION

The Distribution of Connexin 43 and the Principle of RRIC

The regulatory genes are albumin-1, targeted albumin, rapamycin mTOR, connexin 43 and MNK (FD) liver mice to study the therapeutic function and mechanism of gastric dysfunction during self-Immolation and gap compounds. ICC is a plasma intercellular cell that mainly spreads in the gastrointestinal tract. Their main function is to

regulate the basic electrical rhythm of gastrointestinal tract and the transfer of neurotransmitters. At present, it is believed that developmental and dispersive dysfunction, structural or distributive abnormalities, loss of network pathological damage, and anoxia or degeneration. In the process of aging, it may be the main cause of gastrointestinal diseases⁹. The main functions include participation in the initiation of slow wave gastrointestinal tract. Cells that produce slow wave potentials, pacemakers, and regulate delayed gastrointestinal activity. He took part in a transmission of electricity. Slow waves transfer microelectronic activities to the gastrointestinal curvature through ICC network structure, and control the bending process in the gastrointestinal tract. The structure of electronic signal network is the basis of electronic signal transmission. Nerve signal transmission. Several networks have been established with the gastrointestinal digestive system, and multiple receptors have been established on the gastrointestinal membrane. The reactions to neurotransmitters, such as acetylcholine, nitrogen oxides, vasoactive peptides and substance p-indicate that ICC is involved in the transmission of neural signals through the gastrointestinal tract. Regulate intestinal hormones. ICC involves the secretion of gastrointestinal hormones, such as gastric bedsores, trypanosomiasis, gallbladder, and iron reduction. The selective cleavage with methylene blue showed that the relaxation effect of melamine on the posterior myocardium almost disappeared after injury. Similar findings were also found in the study of gastric acid metabolism receptors¹⁰. It plays an important role in maintaining normal gastrointestinal motility. In recent years, more and more studies have shown that ICC abnormalities are closely related to the occurrence of a variety of digestive diseases. Objective to study the effect of digestive Decoction on functional digestive sinus, gastric antrum and deltoid muscle.

The pathophysiology related to dyspepsia is mainly gastrointestinal energy disorders and sensory abnormalities. Gastrointestinal disorders, sinus pulse index decreased, gastrointestinal irrigation delay,

duodenal movement asymmetry. Studies have shown that gastrointestinal dysfunction may account for 70% of FD patients and 40% of gastrointestinal dysfunction patients. The patients with duodenal dyskinesia accounted for 30%. Early signs of malnutrition may appear in the case of scattered injury in the lower stomach, while meteor disease, nausea and vomiting may be the main causes of food poisoning. The reduction of duodenum is caused by abnormal coordination of duodenum movement after food, which is the main cause of stomachache. The pathophysiology of gastric dyspepsia is related to the damage of gastric dissociation function and the imbalance of gastric electrical resistivity, which reduces the gastric antrum and intestinal motility. Therefore, gastrointestinal disease is an important pathophysiology of FD. Many studies have shown that FF patients have delays in gastric lavage and accelerated reduction of small intestine. Therefore, an important method to measure gastrointestinal energy status and drug treatment effect is to monitor the intensity of intestinal irrigation and enteral injection. Experimental methods for measuring intestinal exhaust in rats and small bowel movements show how drugs help dysfunctional digestive disorders.

Gastrointestinal motility is mainly composed of two neurons, nanos rhythms are decreased, and cells in the gastrointestinal tract of the criminal court have the ability to generate and transmit slow waves and transmit intestinal nervous system signals to smooth muscles. The close relationship between ICC and circular longitudinal plane muscle provides morphological basis for ICC in neural signal modulation. Studies have shown that in some diseases related to acetylcholine, there are reductions, relative deficiencies or structural changes. If not, they are the only driving force for the slow flow of gastrointestinal activity and the necessary conditions for creating plane waves. Classification of cell form and location: ICC (muscle under gastrointestinal mucosa, deep purple ICC-IM) is located in microsphere area¹¹. According to the functions: participate in the formation and management of slow waves, including ICC-MY and ICC-SMP, and participate

in the regulation of neural signals of intestinal flat muscles (including ICC-SMP), which are transmitted in the stomach and small intestine. The spread of opinions, stomach measures will be based on three roles: vo-p1, the generation of chickenpox potential, gastrointestinal activity of qipao cells, vow-ii involved in the effective transmission of electricity, the penal court is a close communication friend, involved in the spread of waves, trinity of neural signals through, the penal court is involved in neurons and smooth cell signals. In this paper, we have studied the gastrointestinal tract. Fiber optic electricity is an activity composed of a constant potential, an effective ability and a copper potential. The potential of glycyrrhiza ruralness on the muscle floor, like the recording frequency, is the active potential of smooth gastrointestinal muscles. The muscle contraction rhythm, regulator, ECG, smooth movement and position of ECG are the same, frequency contraction and directional movement, when the copper potential disappears, the stomach smooth, smooth muscle potential action is no longer repeated. Although the body regulates various forms of gastrointestinal movement, the electrical activity of gastrointestinal muscle is the physiological basis of gastrointestinal function. The motor potential of gastrointestinal muscle disappears, and the contraction of gastrointestinal muscle stops, which directly affects gastrointestinal energy ¹².

Biological Function of Shuwei Decoction

FD is the most common clinical functional gastrointestinal disease and chronic disease, which affects the life of patients. According to a study conducted in bed, about 15% of adults in western countries have FD and about 25% of patients are hospitalized. In China, dyspepsia accounts for about 10% and 50% of the total health status. However, studies have shown that in strict clinical studies, there are few effective methods to treat FD with western medicine. Due to the imperfect treatment, the disease occurs again and again. Compared with western medicine, Chinese medicine is more effective in the treatment of FD, which has an important advantage in reducing the psychol

ogical pressure of patients improve the quality of life. Therefore, the mechanics of treating FD in traditional Chinese medicine will greatly contribute to the development of functional gastroenterology. ICC is widely distributed in the gastrointestinal tract. It has the basic electric pulse and conductive function. Studies of morphologists have shown that gastric nerve connections, neurotransmitters such as VIP person, inhale nerve endings, in this regard, we believe, are an important tool that will eventually enrich and release, while the court is full of uninterrupted movement. The interaction with electrical signals is actually to promote and suppress the SMC system through the interface between SMC and ICC. ICC, SMC and nerve fibers connect with each other to form a network structure and jointly regulate gastrointestinal motility. In recent years, studies have shown that it is closely related to many gastrointestinal diseases, and its abnormal distribution and decrease in number may be an important pathophysiological mechanism leading to it. Experimental research: from slow wave to slow wave after slow wave, experimental study on paralysis and reduction.

The gastrointestinal cells (kahal) have reticular structure and are distributed in the gastrointestinal tract and muscle. ICC has three main functions: (1) gastrointestinal cells, which generate and transmit physiological slow waves, control the compression and bending of muscles. ICC-ME has the main rhythm starting point and propagation function of slow wave. The distribution of Cx43 protein an integrated enteric nervous system relay station (ICC-DMP) is the first target of intestinal puncture. The recursive fluid released through small intestinal perforation is mainly regulated by ICC-DMP. Therefore, we should control the changes and changes of gastrointestinal motility. On the other hand, ENS terminals, ICC and smooth cells between muscles connect with each other to form a network, forming the main functional unit of movement. (2) Promote the spread of electrical activities. The gastrointestinal tract (ICC) is distributed in the esophagus, the lower segment and the sigma intestine, as well as in several sphinxes. They are interconnected to form a network. ICC is the pacemaker cell of

gastrointestinal slow wave. In the case of damage to the emission region or GJ, the slow wave effect and transmission are affected. There are many protein degradation pathways, including cytochrome pathway and white solution pathway. The recently proposed method of self-immolation aims to degrade Cx43 in the body and during pathological processes. Previous studies have shown that fireman pate is complex because it's the wrong industry, but it's basically a mechanism in which his stomach disease has aroused his interest, "different functional organs, different signal transduction locks, smooth cell gastric muscle dysfunction, genetic and protein disorders, which may also be cells "Is effective." Indicated that the aging mechanism of FD may be related to the abnormal increase of phage level in antrum and the rupture of the relationship between No. 12 intestine and cells. Russian Academy of Sciences found a fire model suggesting that rats express Cx43 protein in torture of Regents, and this stomach soup is one of the main mechanisms for treating functional dyspepsia stomach. This experiment is based on distance learning, and studies motor sign agent standard dollar. The decoction inhibited the WEDU cells in the stomach model rats of firefighters, improved gap contacts with love, and regulated the funk of stomach meridian. Similar images can be cured. FD roll, but its remote control and regulation mechanism is still effective.

Mods are usually developed from general inflammatory syndrome (SIRS) and compensatory anti-inflammatory response syndrome (cars). A large number of inflammatory environments interact with immune cells that control cell, tissue and organ damage. This is the most serious complication of trauma and infection, high incidence rate, tension and prediction. Mods is a complex process, which not only includes a variety of different disease mechanisms, but also combines with excessive inflammatory response and immune dysfunction. Simple anti-inflammatory agents or anti-inflammatory reactions cannot effectively prevent fashion. According to the documents, after injury, shock and infection, the gastrointestinal mucus was heavily perfused. Although the circulat

ion is in a larger dynamic state, local tissues and organs, such as the gastrointestinal tract, remain in a state of severe ischemic hypoxia. This is because the neuroendocrine system is stimulated by carcinogenic factors, which lead to the redistribution of blood throughout the body, leading to tissue damage. Gastrointestinal tract is a sensitive fashion organ. The success or failure of gastrointestinal dysfunction directly affects the quality and prediction of patients' treatment. Recent studies have shown that the gastrointestinal tract is an active participant in the physiological processes of path pathology. Peristalsis weakened or disappeared, intestinal coagulation, intestinal mucus accumulation, intestinal mucus accumulation, edema, barrier function damage, intestinal bacteria, endotoxin, translocation, intestinal toxins into the system circulation. Chronic inactive mucous membranes can make bacteria and toxins often enter the blood system, which leads to active activation and release of a large number of inflammatory mediators and cells throughout the body. It can lead to vasoconstriction, increase the porosity of the tube, form micro blood clots in the blood vessels, lead to further ischemia of tissues, hypoxia and intestinal wall dysfunction, leading to systemic inflammatory response, and eventually lead to mode. Therefore, the gastrointestinal tract is considered as the starting point and target of SIRS / mods initiation, and its function has become an important index to determine the prediction of key patients.

EXPERIMENT OF SHUWEI DECOCTION ON THE DISTRIBUTION OF CX43 PROTEIN IN RATS WITH FUNCTIONAL DYSPEPSIA AND THE REPAIR AND REGENERATION OF CAJAL INTERSTITIAL CELLS

Experimental Preparation of Shuwei Decoction on Distribution of Connexin 43 Protein and RRICC in Rats with Functional Dyspepsia

48 rats were randomly divided into normal group, model group, debride group, low-dose FAE, low-dose FAE and high-dose FAE groups, with 8 groups. In addition to the normal group, the other five groups used the advanced tail stimulation

technique as the FD model. On the day of assembly, bat hormone (0, 30 mg-ml⁻¹), low calorie frying liquid, medium dose immature frying liquid, high dose group) 0.50 g-1.0 g-1.2 g-1 were used. The size of the rat group was determined as the size of the stomach. The ultra-fine structure of gonococcus WEDU was observed under the light microscope. The ICCs elide serum contained the aortic wall of SCF rats. The c-kit monk was found by immunofluorescence SCF mRNA was detected by RT-PCR and c-kit protein and SCF protein were detected by Western blot. The serum containing Chadha Shogun powder was prepared by serum pharmacology. ICC of rat stomach was identified by burning method. ICC was taken together with drug containing serum and related drugs during growing period. Methods the CCK-8 method was used to detect the inhibitory effect of glutamic acid on 24-hour ICC in high, medium and low concentrations. The effects of glutamate on ultrastructure and ICC of rat hepatocytes were observed by transmission electron microscopy. Immunofluorescence assay was used to detect the effect of glutamate on the light expression of self-excited peptide LC3. According to the optimal concentration and experimental time of glutamate, the blank control group, 10% Chadha Shogun powder group and 3m group (5mmol / L) were set again. CCK-8 method was used to detect the effect of sisters on ICC activity. The ultrastructure of ICC and the changes of autogenous membrane were observed by transmission electric environment. The light intensity of ICC self-silencing protein LC3 was measured by immunofluorescence method.

Experimental Content

In this experiment, the middle cerebral artery infarction model of 10-week-old male. Wistar rats was established by suture method. The rats were randomly divided into FAI group, nimodipine group, Fai + nimodipine group. Angelica daturic group, model group, sham operation group and normal control group. The rats were randomly divided into two subgroups: 24h and 4D, with 8 rats in each group and 112 rats in total. The rats in the

experimental group were conscious immediately after modeling, and were given acid insoluble ash suspension (6.75mg/ml), nimodipine suspension (0.9mg/ml), acid insoluble ash + NIM horizon mixture (containing 13.5mg acid insoluble ash particles and 1.8mg NIM tablet). Angelica daturic suspension lavage (6.75mg/ml). The model group, control group and normal group were given normal saline, 2ml each time. The subgroups were given gavage for 24 hours, and were killed 24 hours after modeling. After 4 days of continuous administration, the rats were killed. The neurological deficit behavior scores were performed twice in the two groups immediately after waking up and before death. The infarct volume was calculated by TTC staining. Gastric antrum and upper small intestine were prepared. Histopathological changes of gastrointestinal mucosa and ultrastructure of interstitial cells of Cajal (ICC) were observed under light and transmission electron microscopy. The contents of c-kit, SP and connexin 43 in gastrointestinal tissues were determined by immunohistochemistry.

Mods are usually developed from general inflammatory syndrome (SIRS) and compensatory anti-inflammatory response syndrome (cars). A large number of inflammatory environments interact with immune cells that control cell, tissue and organ damage. This is the most serious complication of trauma and infection, high incidence rate, tension and prediction. Mods is a complex process, which not only includes a variety of different disease mechanisms, but also combines with excessive inflammatory response and immune dysfunction. Simple anti-inflammatory agents or anti-inflammatory reactions cannot effectively prevent fashion. According to the documents, after injury, shock and infection, the gastrointestinal mucus was heavily perfused. Although the circulation is in a larger dynamic state, local tissues and organs, such as the gastrointestinal tract, remain in a state of severe ischemic hypoxia. This is because the neuroendocrine system is stimulated by carcinogenic factors, which lead to the redistribution of blood throughout the body, leading to tissue damage. Gastrointestinal tract is a sensitive fashion organ. The success or failure of

gastrointestinal dysfunction directly affects the quality and prediction of patients' treatment. Recent studies have shown that the gastrointestinal tract is an active participant in the physiological processes of path pathology. Peristalsis weakened or disappeared, intestinal coagulation, intestinal mucus accumulation, intestinal mucus accumulation, edema, barrier function damage, intestinal bacteria, endotoxin, translocation, intestinal toxins into the system circulation. Chronic inactive mucous membranes can make bacteria and toxins often enter the blood system, which leads to active activation and release of a large number of inflammatory mediators and cells throughout the body. It can lead to vasoconstriction, increase the porosity of the tube, form micro blood clots in the blood vessels, lead to further ischemia of tissues, hypoxia and intestinal wall dysfunction, leading to systemic inflammatory response, and eventually lead to mode. Therefore, gastrointestinal tract is considered as the starting point and target of SIRS / mods initiation, and its function has become an important index to determine the prediction of key patients.

Experimental Results and Related Data

ICC myocardial infarction group is shrinking, shrinking, core cracks, nuclear space in the cell system is significantly expanding, structural abnormalities in the cell plasma, local micro tissue cells cannot be recognized, and adjacent smooth muscle in the local rapid contraction or disappearance, in the intercellular fissure, such as nerve endings. The number of ICC rats under the intervention of FIFA, in the more popular group, on the overall basis, increased mitochondrial membrane in the cytoplasm, increased endoplasmic reticulum in the chest, the structure is clear, there is a gap around the flat muscle. The most prominent one is the function of Fitch + Nemo de pine group, in which whicker group is no different from model group. SP, connexin 43 and immune c-kit positive materials in gastric tissue of rats with multiple strokes were significantly decreased. The sphere of c-kit control group was quite large sexual division (acid insoluble and its horizon intervention rats' gastroin

testinal tissue SP, Cx43, immune c-kit positive substances decreased significantly). Bai compared with the control group, there was no significant difference in the model gastric mucus membrane injury in rats, different types of myocardial infarction, blood injection, edema, inflammatory infiltration, stellar and ulcer characteristics, considerable sexual division of the cells in the control group (interference insolubility of the rat acid group model and its horizon mucus gastric injury) and control group. There was no significant sexual difference between the two groups, as shown in Table 1.

ICC-DMP immunofluorescence microscopic recognition system: compared with the control group, the number of MODS synapses in ICC group is greatly reduced) the number of ICC synapses is decreasing, and the interaction between them is inconsistent. The intensity of cell fluorescence radiation is weakened (ducat ICC-DMP target group is much higher than mods group), and microcellular fluorescence IDS is much higher than $P < 0.01$. Intestinal nerve: acetylcholine in rat intestine) detected a 100% weak reduction of substance P (Yashi) in the world (acetylcholine in DQT treatment group ($P < 0.01$). Compared with the epidemic population, the level of white blood fluorescent. IDS increased significantly ($P < 0.01$). ICB intestinal network: compared with the control group, the number of epidemic enteric nerves and ICC was significantly reduced, the communication function was weakened, and the smooth muscle of intestinal neural network ICC was seriously damaged. Compared with MODS group, the number of intestinal nerves in DQT group and ICC group increased significantly.

EXPERIMENTAL RESULTS EVALUATION AND IMPACT ANALYSIS

Effect of Shuwei Decoction on the Distribution of Connexin 43 Protein in Rats with Functional Dyspepsia

Studies have found that under the action of Shuwei Decoction, the ICC in the rat Cx43 protein forms a longitudinal tissue with a grid structure. In the DMP area, the longitudinal and azo of cyclic choline/anopheline can form a

multiple nerve node Network structure. The ICC network surrounds the choline nitrogen neural network. The long synapses of ICC are parallel to the muscle hair, while the short synapses are closely related to nerve fibers and smooth muscles. ICC is closely connected with enteric nerve fibers, and the ICC network structure of neurons is basically maintained. The number of ICC in the DCQD group is increased, the connection between ganglia is more than that in the MODS group, and the fluorescence intensity is enhanced. The connection data of neuron ICC network structure is shown in Table 2. ICC is closely connected with enteric nerve fibers. The DCQD group has 20% more ganglion connections than the MODS group and 10% lower than the DMP group.

The results of the study showed that the small intestine ICC-DMP ultrastructural characteristics of the Shuwei treatment group were normal, the nucleus morphology was normal, and the heterochromatin had a few edges, which was better than the MODS group. There is more cytoplasm in the cytoplasm, and the morphological structure is clear. There are a large number of mitochondria, ribosomes, endoplasmic networks and hormone bodies. Small mitochondrial tumor with dilated endoplasmic reticulum. Some microfilaments flow from the center of the cytoplasm to the outside. The main membrane is almost complete. Normal control group mouse small intestine meridian-applied superstructure and morphological characteristics: spindle cell, large and obvious nucleus, oval shape, chromatin diluent, excellent structure, basically surrounding the nucleus, the periplasm of the nucleus is reduced, mitochondria. We can seeing obvious sliding nashi Seth and rebook, the rather large caveola attracts the film, the Golgi device, and the endoplasmic reticulum has a lower roughness. Visible microfilaments (5 nm) and midline (10 nm) are in the cytoplasm. The midline exists in the perinuclear and cytoplasmic protrusions. It can be seen that the electron-tight cytoplasm and the basement membrane are intact. The rat small intestine tissue (ICC-DMP) cell number is greatly reduced, the structure is abnormal, especially the periplasmic hillock.

The cytoplasmic microstructure of some cells cannot be clearly defined. Cytoplasmic bubbles formed and membranes ruptured. Mitochondria atrophy, edema appears, and scratches crack, dissolve, empty, and even rupture. The endoplasmic network expands the particles, and many filaments and interstitial spaces form large droplets of fat. The number of secondary lysosomes is related to the fused lipid droplets and large clusters of glycogen particles. The basement membrane is missing or incomplete, as shown in Figure 1.

It can be seen from the data in Figure 1 that ICC-DMP in the small intestine of Shuwei decoction treatment group plays an important role in the distribution of Cx43 protein, which is 23% higher than that under normal conditions.

The study in this paper shows that the ultrastructure and morphological characteristics of the ICC smooth muscle network of the small intestinal nerve of normal control rats have undergone a series of changes. The interstitial cells of Cajal in rats have membrane vacuoles, with many intermediate filaments and no large myofilaments, which are very close. The third nerve bundle and the gap junctions between smooth muscle cells. ICC-DMP cell bodies are related to nerve endings and nerve bundles. It is close to the nerve fiber, in close contact with the nerve fiber, forming a synaptic contact, and the distance between the left and right is only 20 nanometers. The emergence of ICC-DMP and ICC formed a gap connection. A large number of ICC-DMP processes are closely related to smooth muscle cells, forming gap junctions. Smooth muscle cells have normal morphology and are interconnected by gap junctions. There is no close connection between nerve fiber ends and smooth muscle cells, the distance is about 100nm, which forms the morphological basis of a complete neuron ICC smooth muscle network. The ultrastructural and morphological characteristics of the smooth muscle network of the small intestinal nerve ICB in the MODS group: ICC-DMP cell processes were significantly reduced or disappeared, many terminal processes were broken, and the cytoplasmic content was lost. Nerve fiber terminal massive swelling and neurotransmitter vesicles decrease or disappear.

There is no synaptic connection between ICC-DMP and nerve fibers, and the distance increases. The ICC-DMP interval and its connection and loss with the smooth muscle interstitial space exist in the larger space. Lamellar bodies appear between ICC-DMP bodies and between ICC-DMP and nerve endings. The large amount of liquid and discontinuous gel in the interstitial tissue destroyed the morphological basis of the neuronal ICC smooth muscle network, as shown in Figure 2.

It can be seen from the data in Figure 2 that Shuwei Decoction plays an important role in the RRICC, and the repair and regeneration speed of interstitial cells of Cajal is higher than 30% under normal conditions.

Effect of Shuwei Decoction on RRICC in Rats with Functional Dyspepsia

It has been found that gastrointestinal function is an important index for the prediction of key patients. Gastrointestinal resuscitation is the first and most important step. Repairing gastrointestinal tract can effectively prevent the further development of disease. It is involved in the transmission of slow waves and plays an integral and transport station role in nerve transmission. As the basic functional unit of gastrointestinal motility (BFUGM), it is closely related to gastrointestinal motility dysfunction. Therefore, it is necessary to find an effective method to treat functional gastrointestinal motility disorder and promote the recovery of gastrointestinal motility, as shown in Figure 3.

It can be seen from the data in Figure 3 that Shuwei decoction has a great influence on the distribution of Cx43 protein in rats with functional dyspepsia. On the basis of the distribution of Cx43 protein, the distribution area is increased by 20% compared with the original basis.

The changes of various cholinergic neurons in ICC-SMC can be observed by laser complementary microscope. Compared with the control group, ICC has a saturated shape, spindles, and multiple buoys. ICC is closely related to the process of building network structure. There are many nerve fibers

around ICC, which also connect with each other to form a network structure. Long time ICC process is accompanied by peripheral nerve fibers. These fibers connect the short process with ICC and SMC neighbors around ICC. The density of nerve fibers of these neighbors surrounds each other. ICC and neural network have completed the ICC bold energy network structure. ICC and cholinergic nerve are distributed unevenly, and there is a defect of close connection between ICC and peripheral nerve and smooth muscle. The International chamber of commerce shogaol group is a saturated and diverse group, which greatly increases the intensity of fluorescence radiation and is greatly enhanced in the model group. It is closely related to the international chamber of commerce. Compared with the model group, the number of nerve fibers and the intensity of fluorescent fibers have been greatly increased. These fibers are interconnected into a network structure. ICC is closely related to SEC and peripheral nerve fibers, and the structure of ICC bile ion neuron network is relatively complete. The larger ICC group of Shenyang group is filled in spindle form, and slightly more than that of model group. In the model group, the fluorescence intensity increased. Cells have a process, and the ICC is closely linked. ICC is closely related to fiber-optic cells and peripheral nerve fibers. In these cells, the cholinergic neurons of ICC remain basically unchanged. If there is one or more malnutrition in an animal, the toxin in the animal will have a serious effect on the toxin in the animal; as shown in Figure 4.

It can be seen from Figure 4 that Shuwei decoction has a great influence on the RRICC in rats with functional dyspepsia, which improves the repair and regeneration speed of interstitial cells by nearly 30%.

CONCLUSIONS

The results of RT-qPCR showed that the number of high-dose albumin-1 decreased significantly ($P < 0.01$), $P < 0.01$, significantly increased mTOR expressionism $P < 0.01$, significantly increased the expression of Cx43 in middle and high-dose groups ($P < 0.01$) decoction could improve the expression of MTR Cx43

protein and mRNA in FD model. It can reduce the expression of protein albumin-1 and MRNK, inhibit autophagy, strengthen cell-cell communication and treat functional dyspepsia.

The structure of ALICC ICC SMC model is incomplete, and the relationship between ICC and SMC is seriously damaged. Shuwei Decoction plays an important role in the RRICC. The speed of RRICC is higher than 30% under normal conditions. The ICC-SMC network structure of high, medium and low dose choline neurons in ICC-SMC group is relatively complete, while ICC cooperates closely with SMC. The decoction contributes to ICC regeneration and morphological regeneration, improves the energy of gastric diseases and treats FD.

Shuwei decoction has a great influence on the RRICC in rats with functional dyspepsia, and improves the speed of RRIC by nearly 30%. On the basis of the distribution of Cx43 protein, the distribution area increased by 20% compared with the original basis. Shuwei decoction has a great influence on the RRICC in rats with functional dyspepsia, and improves the speed of RRIC by nearly 30%.

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TABLES AND FIGURES

Table 1. Information on control experiment data			
Group	SP	Cx43	C-kit
Angelica daturic group	0.01	0.05	0.01
Model group	Shrinkage	Nuclear	Heterochromatin
Fructus aurantia immatures group	Significant decrease	Erosion and ulcer	Most obvious

Table 2.
Application evaluation of Shuwei decoction on the distribution of connexin 43 protein and the RRICC
in rats with functional dyspepsia

ICC	DMP	MODS	DCQD
Reticular structure	Structural loss	Obvious damage	Tight connection
neural network	Reduced strength	Continuous distribution	Synapses
Cricoid longitudinal muscle	Loose connection	Fluorescence enhancement	Nerve fibers

Figure 1.
Effect of Shuwei decoction on the distribution of connexin 43 protein in rats
with functional dyspepsia

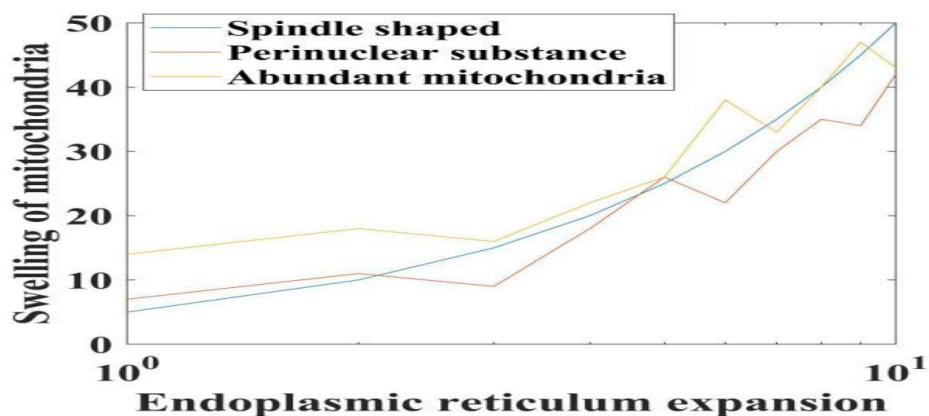


Figure 2
Effect of Shuwei decoction on RRICC in rats with functional dyspepsia

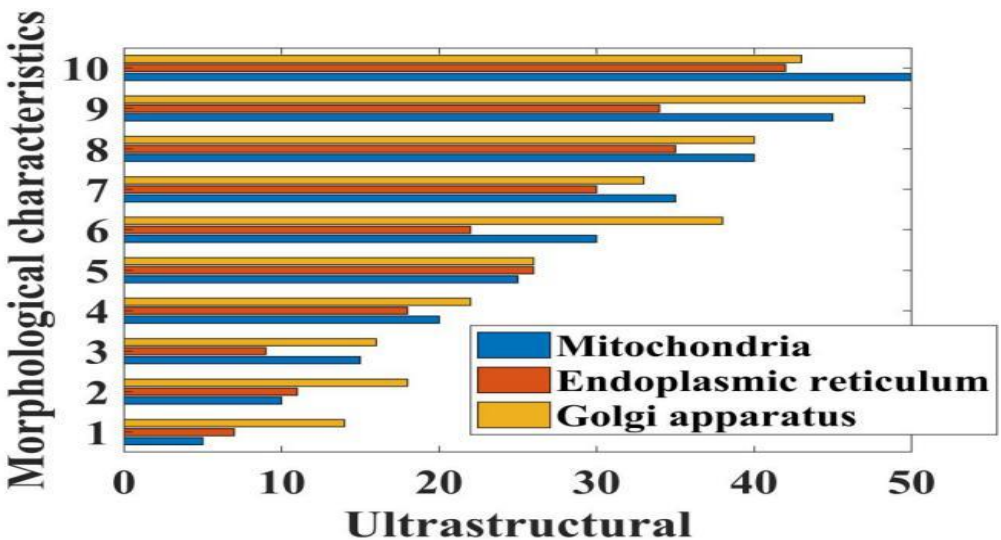


Figure 3.
Effect of Shuwei Decoction on the distribution of connexin 43 in different conditions

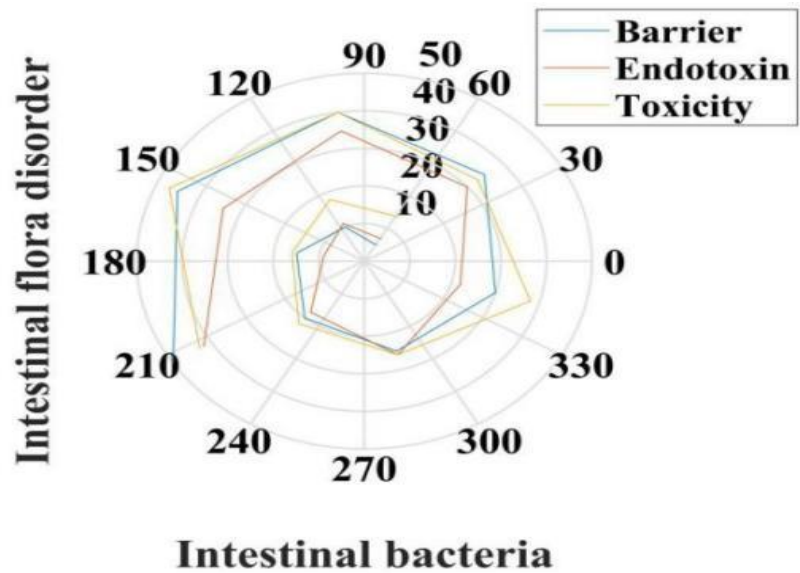


Figure 4.
Effect of Shuwei Decoction on the regeneration rate of interstitial cells of
Cajal in different conditions

