Hunan University of Chinese Medicine researchers find acupuncture effective for the treatment of functional dyspepsia (indigestion). Results from the investigation demonstrate that acupuncture is effective for alleviating upper abdominal pain and burning, nausea, and belching. In a semi-protocolized clinical trial, two primary acupuncture points were proven effective for the treatment of functional dyspepsia (abdominal discomfort or pain with no known organic cause identifiable with endoscopy).

Electroacupuncture and manual acupuncture techniques were used to obtain treatment success. The total effective rates were 91.3% for upper abdominal pain, 90.62% for postprandial excess fullness, 95.45% for premature fullness, 93.33% for upper abdominal burning sensations, 87.5% for postprandial nausea, and 83.33% for belching. [1] This is significantly greater than scores in the sham acupuncture control group, which were never greater than 42.86% for any parameter.

**Primary Acupuncture Points**

For patients in the acupuncture treatment group, two acupoints were applied to all patients: Zusanli (ST36), PC6 (Neiguan). The researchers commented on the point selection. Zusanli was selected for its location on the stomach foot yangming channel and its ability to treat all fu-organs (gallbladder, large intestine, small intestine, bladder, stomach, sanjiao). They add that Zusanli promotes the health of the spleen and stomach, dredges the channel, and regulates gastric tone and motility. [2] They note that Zusanli has been proven effective for patients with gastric motility disorders in prior research. Zusanli regulates gastric electrical rhythms relating to electrogastrographic power and gastric emptying time, secretion of gastrin and motilin, gastrointestinal hormones, and gastric acid (a combination of hydrochloric acid, potassium chloride, and sodium chloride). [3] The researchers also comment that Neiguan is indicated for relieving pain and for promoting qi circulation and stomach health.

Additional points were added for specific diagnostic considerations. For patients with excess syndrome, Taichong (LV3) and Neiting (ST44) were added. For patients with deficiency syndrome, Gongsun (SP4) and Yinlingquan (SP9) were added. The researchers commented on the traditional use of these acupoints.
Taichong is a yuan-source point on the liver channel and promotes health of the liver and stomach. Taichong promotes qi circulation and alleviates pain of the hypochondrium region. Taichong is also useful for treating emesis (vomiting) and abdominal bloating. Neiting is a ying-spring point on the stomach foot yangming channel. Both Taichong and Neiting are acupoints indicated for clearing heat from the liver and stomach channels.

Gongsun is located on the spleen foot-taiyin channel and promotes qi and blood circulation in the spleen and stomach channels. Gongsun regulates gastric acid secretion and prevents its excess. Yinlingquan is located on the spleen foot-taiyin channel and promotes qi circulation. Both Gongsun and Yinlingquan revitalize the stomach and spleen while activating qi circulation.

**Acupuncture Procedure**

Acupuncture points were applied unilaterally and sides were alternated every acupuncture session. Huatuo brand disposable acupuncture needles were used. All points were manually stimulated with a mild reinforcing and attenuating technique to achieve deqi.

Electroacupuncture was applied with a disperse-dense setting and the frequencies alternated between 2 Hz and 100 Hz at a 0.1–1.0 mA amplitude (based on patient tolerance levels) to all needles. Total needle retention time was 30 minutes per each acupuncture session. Acupuncture was applied daily for a total of five acupuncture treatments comprising one course of care followed by a two day break. Four courses of treatment were administered to each patient.

For the treatment of upper abdominal pain, the true acupuncture group outperformed the control group by 56.93%. For postprandial excess fullness, the acupuncture group outperformed the control group by 55.33%. For premature fullness, the acupuncture group outperformed the control group by 57.36%. For upper abdominal burning, the acupuncture group outperformed the control group by 64.76%. For postprandial nausea, the acupuncture group outperformed the sham acupuncture control group by 47.5%. For belching, the acupuncture group outperformed the control group by 40.47%.

**Gongsun (SP4) and Neiguan (PC6)**

In related research, investigators find acupuncture more effective than the drug mosapride for the treatment of abdominal pain and discomfort due to indigestion. Specifically, acupuncture outperformed mosapride for the treatment of functional dyspepsia. [4] The results were confirmed by electrogastrogram and other instruments. The acupoints used in the study were Gongsun (SP4) and PC6 (Neiguan), a classic eight extra channels confluent point combination.

The combination of Gongsun and Neiguan “significantly relieved clinical symptoms such as abdominal distention and discomfort after eating, early satiety, upper abdominal pain, and upper abdominal burning sensation.” The researchers note that “acupuncture outperformed drugs in regulating EGG dominant frequency as well as slow wave frequency.” They add, “compared with the drug group, the acupuncture group showed a significant difference in FDDQL scores.” [5]

Manual acupuncture and electroacupuncture were administered. Patients rested in a supine position. Upon disinfection, a 0.30 mm × 40 mm acupuncture needle was inserted into each point, to a maximum depth of 25–40 mm. A mild tonifying and attenuating manual acupuncture manipulation technique was applied to achieve a deqi sensation. Next, electroacupuncture was applied with a disperse dense wave of 2–100 Hz (0.1–1.0 mA). Intensity level was set to patient tolerance levels or until muscle contractions were observable. Electroacupuncture was applied once per day, 30 minutes per acupuncture session, for a total of 30 days. For the control group, patients received 5 mg of mosapride citrate tablets, 30 minutes before
meals. Tablets were orally administered three times per day, for a total of 30 days.

Patients were evaluated before and after treatment. First, improvements were recorded using a clinical scoring system. Next, a functional digestive disorders quality of life questionnaire (FDDQL) was recorded for each patient. Third, an electrogastrogram (EGG) was utilized to measure the electrical activity of the stomach (including EGG dominant frequency and slow wave frequency). The results indicate that acupuncture is both safe and effective for the treatment of functional dyspepsia and acupuncture is more effective than mosapride. [6]
References
[5] Ibid.
[6] Ibid.