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Using Bidens And Achillea To Treat Acute Finger Bowel Ulcers and Researching Its Phenolic Characteristics

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Abstract: One of the most prevalent gastrointestinal disorders is duodenal ulcers. Approximately 5–10% of people worldwide will at some point in their lives suffer with this illness. There are two to three times as many males as females. Between the ages of 30 and 50, more develops. Disease rates are high in industrialized nations like Uzbekistan, the US, and Europe. Although the illness is very uncommon in Asia and Africa, Helicobacter pylori infections are quite common in places with inadequate sanitation. Ninety-five percent of cases are caused by Helicobacter pylori infection. Fast food that is hot, salty, and greasy causes malnutrition. Nervousness and psychological aspects. Bidens and Achillea are used to treat duodenal ulcers. When it comes to gastrointestinal disorders, the herbs Bidens and Achillea are said to be quite beneficial. They have antibacterial, anti-inflammatory, and wound-finishing properties. A solution containing 14.286 mg/L of each vitamin was created after the first 200 µL of B1, B6, B3, B12, and PP were removed. This led to the creation of standard solutions with 7.143, 3.571, and 1.786 mg/l. Standard vitamin C solutions with concentrations of 286, 143, 71.5, and 57.2 mg/l were also prepared. Pure water with a concentration of 0 mg/l was used to construct a calibration graph.

Keywords: Gastrointestinal disorders, Helicobacter pylori infections.

Introduction: In Uzbekistan, duodenal ulcers are among the most prevalent gastrointestinal conditions. Approximately 5% of people have this illness[10]. The condition is more prevalent in people between the ages of 20 and 40. It is five to six times more common in men than in women. Risk factors: An poor diet that is inconsistent might cause the condition to develop. The development of the condition is influenced by stress and psychoemotional elements, including mental weariness and both acute and chronic mental events. There are certain distinct symptoms associated with duodenal ulcer illness, even if they are similar to those of stomach ulcers[13]. These are its primary symptoms: Pain in the upper abdomen, just above the navel, is the most common symptom. "Hunger pains" are made worse by prolonged fasting or starvation [4,8].

After eating, it feels better. It may show up early in the morning or at night. Due to the overproduction of gastric juice, boiling the crust (increased acidity) would result in a bitter aftertaste behind the chest. It frequently happens after hot and fatty meals. collection of gas and stomach bloating. abdominal swelling and pain following a meal. Flatulence, or gas buildup, is seen as a result of the intestinal system's malfunction[9].

Some people experience nausea after eating. In extreme situations, excessive production of stomach juice results in vomiting. Some individuals experience an increase in appetite; they eat more to quell "hunger pains." Conversely, in some, weight loss and a reduction in appetite are seen. Constipation or constipation due to poor intestinal function might be noted. Severe consequences, such as bleeding or a deeper cut. vomiting that is dark or crimson (stomach

hemorrhage). Feces that resemble black (blood mixed feces) [5]. Acute, stabbing pain is a sign of a perforation, or puncture of the wound. Emergency medical attention is required if the patient goes into a condition of shock! It is advised to consult a physician if the illness is exhibiting symptoms! Maintaining a healthy lifestyle and safeguarding the gastrointestinal tract are crucial in preventing duodenal ulcers.

The following actions lower the chance of contracting the illness: a well-organized diet: eating at the same time each day will stop the stomach from producing too much liquid. Consuming meals that are easy to digest, such as milk and dairy products (if not tolerated). steamed veggies and meat. cereal-topped porridge (oatmeal, buckwheat). Avoid meals that are fried, salty, spicy, or very hot or cold[11]. Avoidance of strong coffee, alcohol, and carbonated beverages. The stomach lining can be harmed by ongoing stress, thus relaxation and following a sleep schedule (sleep for at least 7-8 hours) are important. Increasing physical activity (mild walking, sports), practicing yoga, meditation, or breathing techniques. defense against infection with Helicobacter pylori. hand washing before to eating. consuming only wholesome, properly prepared meals. adherence to personal hygiene regulations. using caution when taking medicine. avoiding long-term use of medications that might harm the stomach, such as aspirin, ibuprofen, and non-steroidal anti-inflammatory medicines, unless prescribed by a physician. It is advised to take these medications with stomach protectors if they must be taken. Getting rid of negative habits. Smoking tobacco and consuming alcohol damage the gastric mucosa and increase the risk of developing a wound. Doctor examination. Regular visits to the doctor if you have digestive problems or chronic gastritis. Check for Helicobacter pylori bacteria if necessary. Duodenal ulcer with medicinal herbs davolash.An in traditional medicine, various medicinal plants are used to treat duodenal ulcers [15]. These plants help protect the gastric mucosa, reduce inflammation, and repair damaged tissue. The best plants and ways to use them are listed below: Bidens's effects include covering the stomach mucosa, protecting it, and lowering inflammation. It has an anti-inflammatory action, heals wounds fast, and repairs the stomach mucosa. One glass of boiling water must be used to soak one spoonful of Bidens baggi and rose, and the mixture must be allowed to brew for ten to fifteen minutes. It is advised to consume it on an empty stomach each morning. .

Course: two to three weeks.

Dalachoy (Hypericum perforatum). Effect: preserves the mucous membrane, balances the acidic environment of stomach juice, and speeds up wound healing. It reduces inflammation and has a relaxing impact on spasms. Use instructions: Infuse one glass of boiling water with one spoonful of dried dalachoy for half an hour. Drinking one-third cup before meals two to three times a day is advised. Other advice: before consuming therapeutic herbs, a doctor should be contacted. It's critical to maintain a balanced diet and stay away from fried, spicy, and salty meals. Stress should be avoided, and restful sleep should be prioritized. These natural and efficient techniques are utilized as adjuvant therapy in conjunction with prescription drugs[3,13]. Bidens and Achilleaare used to treat duodenal ulcers. When it comes to gastrointestinal disorders, the herbs Bidens and Achillea are said to be quite beneficial. They have antibacterial, anti-inflammatory, and wound-finishing properties. Bidens's beneficial qualities include restoring the stomach juice's equilibrium. lessens inflammation. For half an hour, soak one teaspoon of dried Bidens in one cup of hot water. Two to three times a day, half a glass should be consumed before meals. The beneficial qualities of Achillea(tysjachelistnik, Achillea millefolium) include its antibacterial and anti-inflammatory effects. restores and protects the stomach mucosa.

regulates the overproduction of gastric juice. Infuse 1 cup of hot water with 1 tablespoon of dried Achilleafor 20 minutes. Two to three times a day, half a glass should be consumed before meals. A blend of Achilleaand Bidens. When combined, these herbs have a more potent effect on the digestive tract. Soak one teaspoon each of Achilleaand Bidens in one cup of hot water, then let it sit for half an hour [2]. Two to three times a day, you can have half a glass before meals.

Before using these plants over an extended period of time, it is advised to speak with a physician. Care should be used when using Bidens in people who have low stomach acid. It is not advised for youngsters or pregnant women to consume these plants. Duodenal ulcers can also be treated with the use of natural healing agents like Achilleaand Bidens. Assessment of the extract's water-soluble vitamin content using the YUSSCH method Experience section. used equipment and a jet. Rhydburg Pharmaceuticals (Germany), Carl Roth GmbH (Germany), DSM Nutritional Products GmbH (Germany), B1, B2, B3, B6, and PP vitamins (BLDPharm) are the sources of vitamin B12. The following reagents were utilized at HPLC level purity: water, acetonitrile, chemically pure brand acetic acid, and sodium hydroxide.

The high-performance liquid chromatograph LC-40 Nexera Lite, manufactured by the Japanese company Shimadzu, was used to measure the quantity of water-

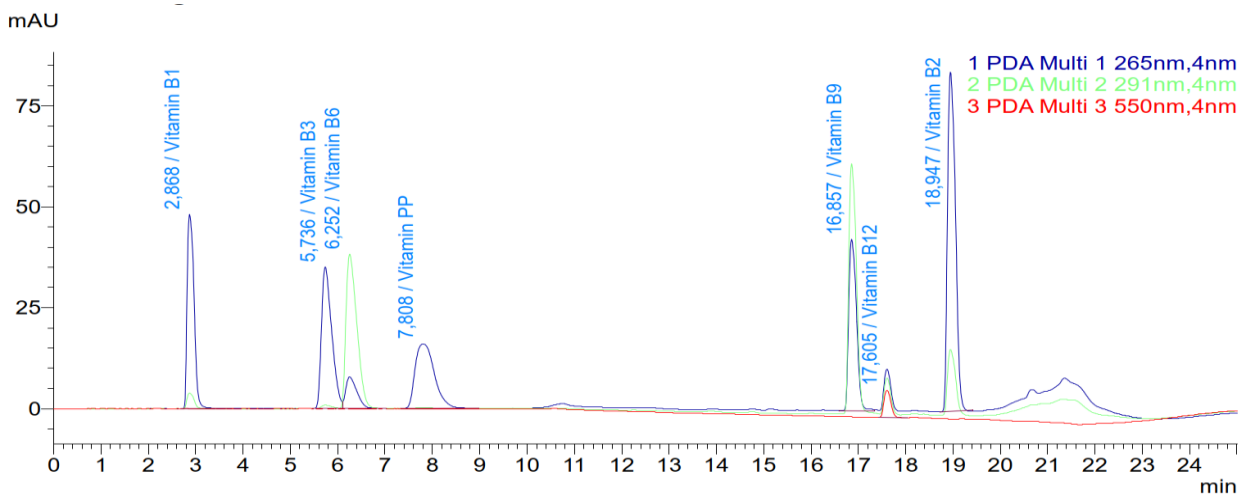
soluble vitamins present in the plant [1]. standard solutions' preparation. C (CAS 50-81-7), B1 (CAS 59-43-8), B6 (CAS 58-56-0), B3 (CAS 59-67-6), B12 (CAS 68-19-9), and PP (CAS 98-92-0) solutions are made by dissolving 50 milliliters of 0.1 n li HCl solution containing 5 milligrams of each vitamin (100 mg/l). Vitamins B2 (CAS 83-88-5) and B9 (CAS 59-30-3) were dissolved in 50 milliliters of a 0.025% sodium hydroxide solution to create standard solutions[9].

Table 1: Vitamin identification using a phase gradient technique.

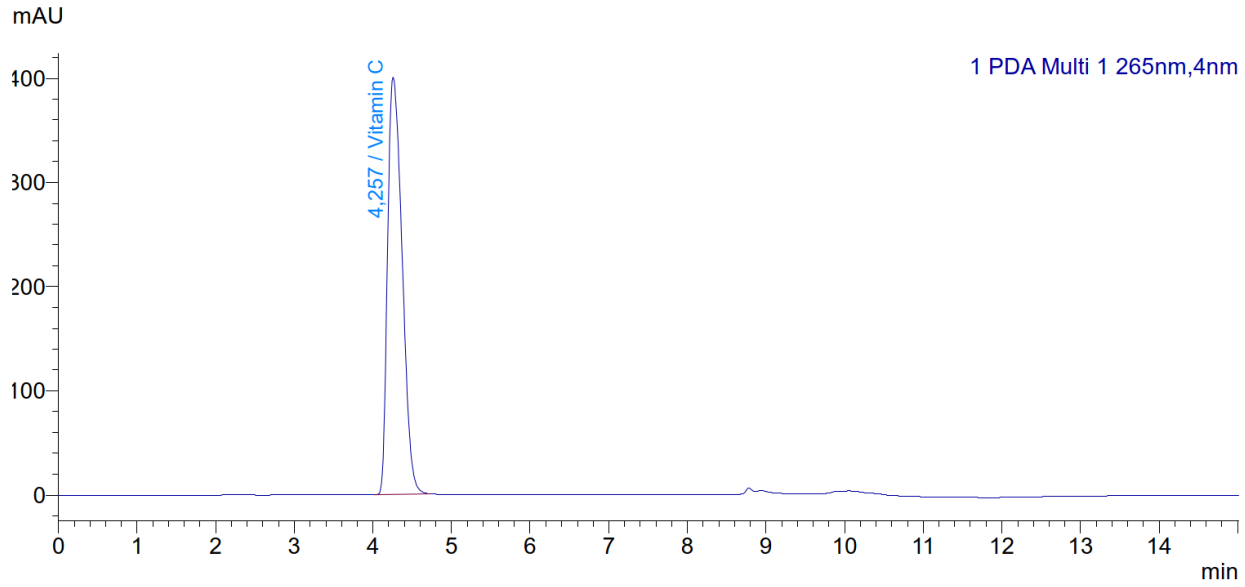
Time, minutes	Atsetonitril (A), %	0.5% acetic acid (B), %
0	0	100
3	0	100
14	20	80
17	50	50
18	0	100
25	Finish	

Table 2: Vitamin C levels are determined using the motile phase gradient software.

Time, minutes	Atsetonitril (A), %	0.5% acetic acid (B), %
0	0	100
2	0	100
6	50	50
6,01	0	100
15	Finish	



1. Fig.. Chromatogram of a standard solution of vitamins.



2. Fig. Vitamin C standard solution chromatogram.

RESULTS

Determination of vitamins in the sample extract. A chromatogram of the sample extract (3-4 pictures) was taken, and on the basis of the results, the amounts of vitamins contained in 100 g of the sample were calculated with the following formula and presented in Tables 3.

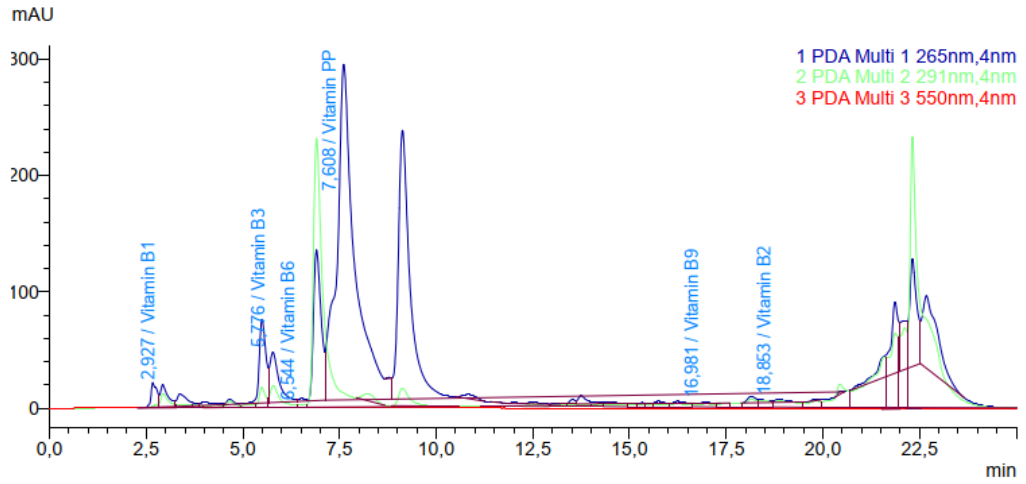
$$X = \frac{C_{vit} \cdot V_{ekstract}}{m_{sample}} \cdot 100\ g$$

Here, the content of vitamins in the fruit of x – 100 grams, mg;

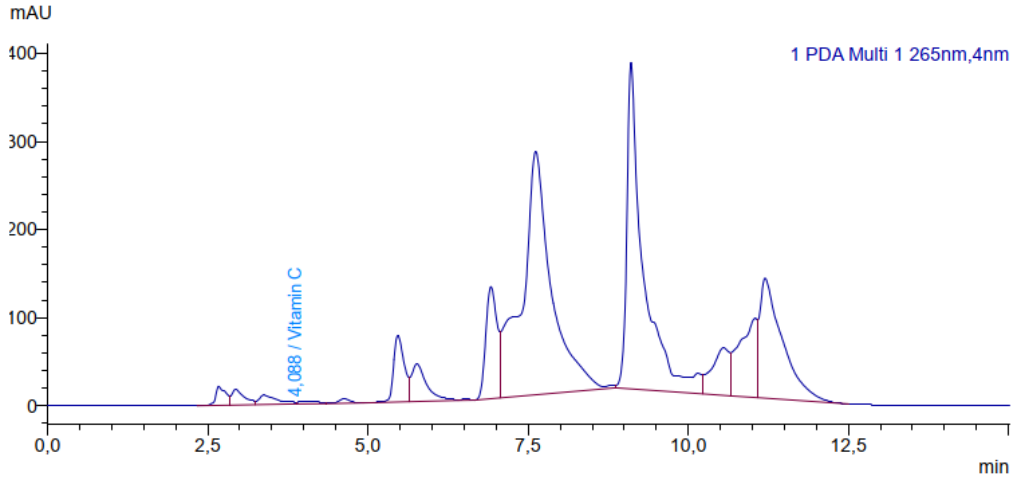
C vit is the concentration of the vitamin contained in the extract determined by the Yussch method,mg/l;

V ekstract-sample extract size, l;

Sample is the mass of a sample weighed to make an extract.



3. Fig. Chromatogram for the determination of vitamins in the sample extract.



4. Fig Chromatogram for the determination of vitamins in the sample extract.

Table 3.
The amount of vitamins in the extract and the capture Times.

Vitamin	Capture time, SEC	concentration, mg / l	100 g sample quantity, mg
Vitamin B_1	2,927	7,576	18,940
Vitamin B_3	5,776	19,361	48,403
Vitamin PP	7,608	303,107	757,768
Vitamin B_9	16,981	0,445	1,113
Vitamin B_2	18,853	1,044	2,610
Vitamin B_6	6,544	0,704	1,760
Vitamin B_{12}	Aniqlanmadi	0	0,000
Vitamin C	4,088	2,958	7,395

After removing the first 200 µL of B1, B6, B3, B12, and PP from the vitamins, a solution was made with a 14.286 mg/L concentration of each vitamin. Standard solutions containing 7.143, 3.571, and 1.786 mg/l were thus made. Additionally, standard vitamin C solutions containing 286, 143, 71.5, and 57.2 mg/l were made. A calibration graph was created using pure water at a concentration of 0 mg/l.

Getting the sample extract ready. One gram of the material under examination was put in a 50 ml conical flask, and 25 ml of 0.1 n HCL solution was added in order to extract the water-soluble vitamins. The mixture was extracted for 20 minutes at 60 oC in an ultrasonic bath bearing the GT SONIC-D3 (Chinese) trademark. After cooling and filtering, the mixture was transferred to a measuring flask containing 25 milliliters of water. The extract was utilized for analysis after being filtered and vialed in a 1.5 ml 0.22 µm syringe filter. conditions for chromatography. Vitamin determination. The LC-40d pump, SIL-40 autocamples, SPD-M40 photo-diode matrix detector (PDA), LC-40 Nexera Lite high-performance liquid chromatograph, and LabSolutions version include the standard solutions and sample extract. Software version 6.92 was used to examine it. Both a gradient motile phase and a reverse phase colon of Shim pack GIST C18 (150 × 4.6 mm; 5 µm, Shimadzu, Japan) were used (Table 1).

A gradient motile phase (Table 1) comprising acetonitrile (A) and 0.25% li solution (B) of acetic acid in water was applied, along with a reverse phase Colon of Shim pack GIST C18 (150 × 4.6 mm; 5 µm, Shimadzu, Japan). The column thermostat was set to 40 °C, the injection volume was set to 10 MCL, and the flow rate was set to 0.6 ml/min. Three wavelengths (265, 291, and 550 nm) were used to record each vitamin's analytical signal (peak area) (1-3 photos) [12,14]. Vitamin C was determined using a gradient that lasted 15 minutes (Table 2), and the analytical signal was measured at a wavelength of 265 nm.

CONCLUSION

In Uzbekistan, duodenal ulcers are prevalent and primarily affect young males. The condition can be avoided by maintaining a healthy diet, managing stress, and treating Helicobacter pylori infections as soon as possible. One of the most prevalent gastrointestinal conditions in Uzbekistan is the epidemiology of

duodenal ulcers. Approximately 5% of people have this illness. Distribution by gender and age. Most people with the condition are between the ages of 20 and 40. It is five to six times more common in men than in women.

In Uzbekistan, duodenal ulcers are prevalent and primarily affect young males. The condition can be avoided by maintaining a healthy diet, managing stress, and treating Helicobacter pylori infections as soon as possible. A gastroenterologist should be consulted if any of the aforementioned symptoms are seen. Complications can be avoided with early identification and treatment.

There may be a duodenal ulcer if discomfort starts at night or when you're hungry and goes away after you eat. Stomach ulcers are likely to occur if the patient has nausea, weight loss, and increased discomfort after eating. Early identification and treatment are crucial since stomach ulcers may be linked to an increased risk of cancer. The chance of getting duodenal ulcers can be decreased by maintaining a healthy lifestyle, eating a balanced diet, and managing stress. In addition to preventing the wound, prophylactic adherence will enhance general health.

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