

Effective treatment of gastroduodenitis in Georgia using mineral waters

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DOI: [10.56580/GEOMEDI25](https://doi.org/10.56580/GEOMEDI25)

Abstract

Due to the optimal composition of microelements, treatment with mineral waters "Vardzia" and "Zanavi" in patients suffering from gastroduodenitis led to positive dynamics of the clinical symptoms of the disease. The anti-inflammatory, analgesic and anti-toxic effect of mineral waters was revealed, the structure of the mucous membrane of the stomach and duodenum was significantly improved, which led to the normalization of the acid-producing function of the stomach and the growth of the surface epithelium of the gastric mucosa. The study of the relative effectiveness of treatment with mineral water showed us the priority value of mineral water "Vardzia" in chronic gastroduodenitis, which occurs due to a decrease in the acid-producing function of the stomach. And in the case of increased acid generating function, mineral water "Zanavi" proved to be effective. High efficiency, ecological purity allows these waters to be used both for treatment and prevention.

Keywords

gastroduodenitis, mineral waters: "Vardzia", Zanavi".

Introduction

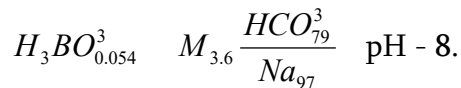
Georgia is rich in mineral waters, there are more than 730 types (quantity is indicated without unexplored waters) of mineral water (M.W.), which are used for balneological purposes [1].

In recent years, 50% of the working population of developed countries suffer from chronic gastroduodenitis. There is a real danger of this disease turning into an ulcer disease. A necessary condition for the normal functioning of the body is its stable chemical composition. In this case, the natural m.w. is a unique healing factor [2]; Because it is characterized by the increase of adaptive and reserve means and does not have negative effects.

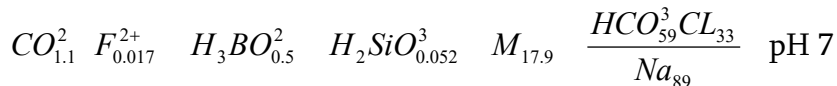
Presented review paper used modern internet generalizations and our previously published results [3; 4; 5]. Accordingly, depending on the relevance, future priorities are presented.

The purpose of the research: drinking m.s. Comparative scientific study of "Zanavi" and "Vardzi". M.W. "Zanavi" is located in Borjomi district, it is low mineralization (3.6 g/dm³),

hydrogen carbonated sodium water rich in F, B, Ba, Fe trace elements and boric acid. MW. chemical composition according to Kurlov's well-known formula is as follows: $F_{0.015}$



High mineralization (17.9 g/dm³) carbonic acid hydrocarbonate, chloride-sodium M.W. was also studied. "Rose"; contains silicic acid, boric acid, rich in microelements F²⁺, Br, I, F; As it is known, it is located in Aspindze district. M.W. The chemical composition according to the above-mentioned formula of Kurlov is as follows:



Material and methods

The therapeutic effect of M.W. "Zanavi" was studied by us and continued on 48 patients suffering from chronic gastroduodenitis. Their age ranged from 38 to 60 years, and m. "Vardzia" was studied on 60 patients, their age was defined as 25-62 years. Chronic cholecystitis (25%), as well as spastic colitis (12%), iron deficiency anemia (2%), obesity (20%) and polyosteoarthrosis (5%) were significant diseases.

Against the background of dietary nutrition, group I patients received during 24 days M.W. "Zanav", and of the II group - M.W. "Vardzia" (3.5 ml per 1 kg of body weight), three times a day, depending on the initial functional state of stomach acid.

Methods: In addition to general clinical-laboratory examinations, the secretory acid-generating function of the stomach was studied with enteric irritant in dynamic rows, using the fractional method of Leporsky; Gastroscopy was performed with a fiberscope from the Japanese company "Olumpus".

Discussion of obtained results

Before treatment, from group I patients suffering from chronic gastroduodenitis, who received M.W. "Zanav", about 40% had some pain in the epigastric area: from dyspeptic events: quite frequent burping in 50%, substantial loss of appetite in 40%, burning sensation in the epigastric area in 15%, unpleasant bitterness in the mouth in 10%, and in the case of almost a third (30%) of patients - swelling and pain in the large intestine. In the same number of patients, these complaints were manifested when the diet was violated. During objective examinations, plaque on the tongue was found in 70% of patients, and significant pain in the epigastrium - in 68%.

In patients of the II group, who received M.W. "Vardzia", in the beginning, periodic pain in the epigastrium area prevailed - 70%, from dyspeptic events: belching in 62%, loss of appetite in 50%, burning in the epigastrium in 20%, bitterness in the mouth in 12%; 12% of patients had bloating and pain in the colon. During objective examinations, swollen tongue was found in 65% of patients.

Discussion of the obtained results: before treatment, 60% of patients had a significant increase in gastric secretion, and 40% - a decrease. M.W. "Zanavi" monotherapy brought about positive

changes in patients suffering from gastroduodenitis, which was reflected in the decrease of the increased parameters in terms of gastric secretion (in the stimulated phase): total acidity from 112.5 mmol/l to 92.5 mmol/l; Acidification products from 6.15 mmol/h to 5.75 mmol/h. The same positive dynamics were revealed in terms of free acidity and its debit, while indicators of reduced acid-forming function increased: total acidity from 34.7 mmol/l to 39 mmol/l.

M.W. "Vardzia" treatment had a beneficial effect on the clinical signs of the disease: from the fifth day, a decrease in pain in the epigastrium area was noticed, and from the ninth day, a decrease in dyspeptic events was observed.

In group II patients who were treated with "Vardzia", 38% had an increase in gastric secretion, 40% - a decrease. After the treatment (in the stimulation phase) there was a significant increase in the decreased parameters in gastric juice from 20.9 mmol/l to 29.5 mmol/l ($p < 0.001$), free acidity - from 10.1 mmol/l to 14.2 mmol ($p < 0.001$), while the indicators of increased acid-producing function decreased slightly: total acidity from 74.5 mmol/l to 70 mmol/l ($p < 0.001$), acidity product - from 5.54 mmol/l to 4.44 mmol/L ($p < 0.001$).

In group I patients with chronic gastritis, 60% had superficial gastritis before treatment, and 10% had focal atrophic changes in the antral part. After treatment, there was a significant reduction in hyperemia (56%) and edema (83.3%) in the mucosa of the stomach and duodenum. If before the treatment 30% of the patients had duodeno-gastric reflux, after the treatment it was removed in half of the patients. Along with the reduction of hyperemia of the mucous membrane, there was an increase in the height of the surface epithelium, which is very important and indicates on the reparative action of M.W. "Zanavi".

Before treatment, in patients with chronic gastroduodenitis who received Vardzia, 70% of patients had superficial gastritis, 8% - focal atrophic changes in the antral part. As a result of the treatment, there was a decrease in the mucous membrane (60%) and edema (88%), as well as an increase in the height of the surface epithelium, which indicates the stimulation of the reparative processes of the mucous membrane. If in the case of "Zanavi" water we obtained better results in patients with chronic gastroduodenitis, who had increased stomach acidity, in the case of "Vardzia" water, this advantage was revealed in chronic gastroduodenitis, which occurred in the case of decreased stomach acidity.

Among the patients who were treated with "Vardzia" water, 2% had iron-deficiency anemia at the beginning, the hemoglobin level was defined as 35 units; After treatment, it increased to 62 units and approached the lower limit of normal.

Conclusions

due to the optimal composition of microelements, the treatment by mineral waters "Vardzia" and "Zanavi" in patients suffering from gastroduodenitis led to positive dynamics of the clinical symptoms of the disease: the anti-inflammatory, analgesic and antitoxic effect of the mentioned waters was revealed; The structure of the mucous membrane of the stomach and duodenum was significantly improved, which led to the normalization of the acid-producing function of the stomach, as indicated by the growth of the surface epithelium of the gastric mucosa.

A comparative study of the effectiveness of the treatment of mineral waters has shown us the priority value of "Vardzia" mineral water in chronic gastroduodenitis, which occurs with a decrease in the acid-producing function of the stomach. And in the case of increased acid generating function, mineral water "Zanavi" proved to be effective. Taking the mineral water "Vardzia", which contains divalent iron in an ionized form, in anemic patients caused an increase in hemoglobin to the norm, which ensured a better supply of oxygen to the tissues. Asthenovegetative syndrome was also removed from the II group patient; This "rose" in mineral water was caused by bromine ions.

High efficiency, availability, economy, ecological purity allow us to actively use both mineral waters in the treatment of patients with chronic gastroduodenitis, taking into account the acidity of the stomach. Compared to pharmaceuticals, they do not have negative effects, their ecological purity and variety of microelements allow us to use them both for treatment and prevention. This was caused by bromine ions in mineral water "Vardzia".

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გასტროდუოდენიტების ეფექტური მკურნალობა საქართველოს
მინერალური წყლების გამოყენებით

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აბსტრაქტი

გასტროდუოდენიტით დაავადებულების, მინერალური წყლებით „ვარძია“ და „ზანავი“ მკურნალობამ, მიკროელემენტების ოპტიმალური შემადგენლობის გამო, განაპირობა დაავადების კლინიკური სიმპტომების დადებითი დინამიკა. გამოვლინდა მინერალური წყლების ანთების საწინააღმდეგო, ტკივილგამაყუჩებელი და ანტიტოქსიკური მოქმედება, მნიშვნელოვნად გაუმჯობესდა კუჭისა და თორმეტგოჯა ნაწლავის ლორწოვანი გარსის სტრუქტურა, რამაც განაპირობა კუჭის მჟავას ფორმირების ფუნქციის ნორმალიზება და კუჭის ლორწოვანი გარსის ზედაპირული ეპითელიუმის ზრდა. მინერალური წყლით მკურნალობის შედეგებითი ეფექტურობის შესწავლამ, დაგვანახა მინერალური წყლის „ვარძია“ პრიორიტეტული მნიშვნელობა ქრონიკული გასტროდუოდენიტის დროს, კუჭის მჟავას წარმომქმნელი ფუნქციის დაქვეითების შედეგად. ხოლო მჟავაწარმომქმნელი ფუნქციის გაზრდის შემთხვევაში, ეფექტურია ზანავის მინერალური წყალი. მაღალი ეფექტურობა და ეკოლოგიური სისუფთავე საშუალებას იძლევა ამ წყლების გამოყენებისთვის, როგორც სამკურნალო, ასევე პროფილაქტიკური დანიშნულებით.

საკვანძო სიტყვები: გასტროდუოდენიტი, მინერალური წყლები: „ვარძია“, „ზანავი“.