

# Effect Of A Phytoextracts Supplement On The Constipation Treatment

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## Abstract

**Introduction** - An herbal extract predicted to reduce constipation and to regularize the intestine is tested. **Materials and methods** - 55 patients with a severe constipation disease from homes for the aged were divided into two groups. In both groups, diet and pharmacologic therapy didn't change in the two periods except for the supplement intake. The first group had a lower dosage of supplement intake, the second group had a higher dosage. We considered as control the period of time before the supplementary intake. **Results and discussion** - In both groups, the average number of evacuation per day increased with the intake ( $p < .05$ ) and the usage of the enemas didn't change ( $p > .05$ ). Obtained results suggest that the lower dosage could be eligible for patients with light and temporary variation of the intestinal functionality while the higher dosage can be considered appropriate for patients with a significant alteration.

## INTRODUCTION

It is well known that constipation is a frequent disease among the adult population and it affects almost all geriatric people. The prevalence of constipation reported the elderly appears variable in the different studies, with rates ranging from 8% up to 65% of the studied populations [1]. The cause is mainly related to the non-uniformity in the definition of constipation and variety of the setting in which the elderly are studied (outpatient, RSA, hospital, etc.). A survey conducted in the United States in subjects with 65 years of age or more found a prevalence of constipation of 24%, while prevalence of constipation of 45% was reported in a population of elderly people with the presence of immobilization syndrome, dehydration and low income food [2]. In a population of about 5400 subjects with more than 65 years, a survey recognized a prevalence of constipation of 24%, defined through the Gastrointestinal Symptom Rating Scale [1]. The most important constipation related risk factors are advanced age (84 years or more), inability, the living in homes for aged, female gender, [3]. The laxatives' prevalence of use is higher in older aged subjects: rates range from 10-18% of routine use in the elderly at home [4], to 25-30% in subjects with 80 years or more, that use laxatives at least once a month [2].

In this study we tested an herbal extract dietary supplement which is predicted to reduce constipation and to regularize

the intestine (table 1).

## Figure 1

Table 1 – Phytoextracts supplement composition

Linseed flax ( <i>Linum usitatissimum</i> L.)
Agar-agar ( <i>Gelidium amansii</i> )
Rhubarb ( <i>Rheum officinalis</i> L.)
Artichoke ( <i>Cynara scolymus</i> L.)
Camomile ( <i>Matricaria chamomilla</i> L.)
Gentian ( <i>Gentiana lutea</i> L.)
Mint ( <i>Mentha piperita</i> L.)
Anise ( <i>Pimpinella anisum</i> L.)
Liquorice ( <i>Glycyrrhiza glabra</i> L.)
Radish ( <i>Raphanus sativus</i> L.)
Fennel ( <i>Foeniculum vulgare</i> Miller)
Marshmallow ( <i>Althaea officinalis</i> L.)
Lemon Balm ( <i>Melissa officinalis</i> L.)
Juniper ( <i>Juniperus communis</i> L.)

## MATERIALS AND METHODS

In 2007, 55 patients from two italian homes for the aged were selected for this study and divided into two groups. All the patients had various metabolic and neuro-psychological diseases, and a severe constipation disease. The medical attendants made reports on the evacuation activity of the

patients every day. In both groups, the diet and the pharmacologic therapy didn't change in the two periods: the only modification was the supplement intake. The first group (Group 1) consisted in 25 patients (21 women and 4 men; 7 women dropped out during the treatment). The average age was 87 years (standard deviation 6,6 years). The treatment with the dietary supplement (Dosage 1: 30 ml a day) lasted 18 days (period 1); we considered the previous 18 days in which the treatment was not held (period 0) as control period. The second group (Group 2) consisted in 30 patients (26 women and 4 men; 7 women and two men dropped out during the treatment). The average age was 85 years (standard deviation 8,9 years). The treatment with the dietary supplement (Dosage 2: 40 ml twice a day) lasted 25 days (period 1); we considered the previous 25 days in which the treatment was not held (period 0) as control period.

### RESULTS AND DISCUSSION

In Group 1, the average number of evacuation per day on the period 0 was 3,8 and it increased in a statistical significant manner in period 1 at 5,7 ( $p < 0,05$ ). In Group 2, the average number of evacuation per day on the period 0 was 8,5 and it increased considerably in period 1 at 12,01. The rise of the frequency is statistically relevant ( $p < 0,05$ ). In both groups, the usage of the enemas per day substantially didn't change in the two periods ( $p > 0,05$ ). All the results are shown in Table 2.

**Figure 2**

Table 2 - Dosages mean frequencies

Dosage 1				
Period 0		Period 1		
Without phytoextracts	3,8	With phytoextracts	5,7	$p < 0,05$
With enema	2,2	With enema	2,7	n.s.
Total	5,7	Total	7,7	$p < 0,05$
Dosage 2				
Period 0		Period 1		
Without phytoextracts	8,5	With phytoextracts	12,0	$p < 0,05$
With enema	1,9	With enema	2,5	n.s.
Total	10,5	Total	14,6	$p < 0,05$

Results obtained with Dosage 1 (30 ml per day) are positive and encouraging: the used dosage is correct for a patient that shows light and temporary variation of the intestinal functionality, rather than for patients that showed chronic constipation.

Results obtained with the higher Dosage 2 (40 ml twice a day) can be considered appropriate for patients that show significant alteration of the intestinal function, since the frequency of defecation, during the treatment period, has increased. A six months follow-up, with a regular intake of herbal extracts, could be appropriate in order to check if the frequency of the intestinal functionality remains into the physiological range.

### References

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