

Bradyenteria Syndrome & Cardiovascular Pathology

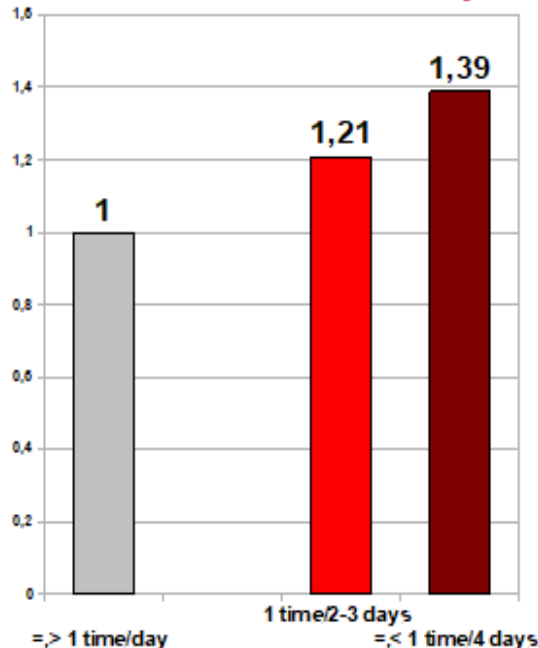
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Objective: to present bradyenteria syndrome as an early syndrome of slowing the rhythm of defecation, this increases the risk of cardiovascular pathology.

Introduction

Cardiovascular Mortality depends on Defecation Frequency



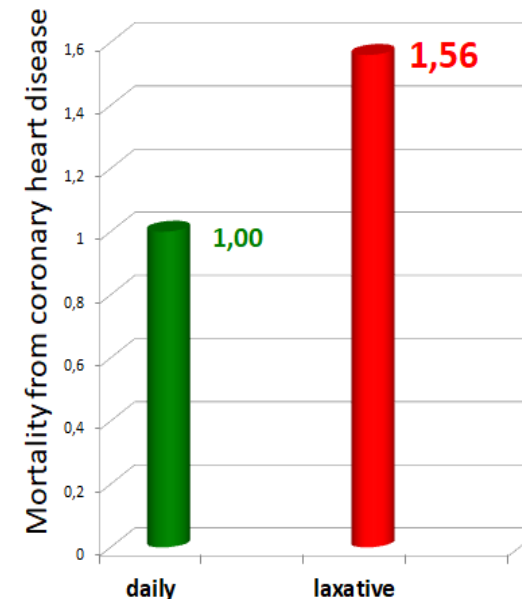
45 112 persons (40-79 y. o.)
Watched for 13 years.

Mild Constipation increases Risk of Cardiovascular Death by 21%.

Severe Constipation increases Risk of Cardiovascular Death by 39%.

Honkura K., Tomata Y., Sugiyama K. et al.
Defecation frequency and cardiovascular disease mortality in Japan: The Ohsaki cohort study
Atherosclerosis. 2016. N246. P. 251-256.

Constipation increases the cardiovascular mortality by 56%.



29 668 men and 42 346 women,
aged 40 to 79 years,
without a history of CVD, 1990-2009

Bowel Movement Frequency:

Daily = 1,00

Laxative Users = 1,56 (95% CI, 1.21-2.03)

for coronary heart disease

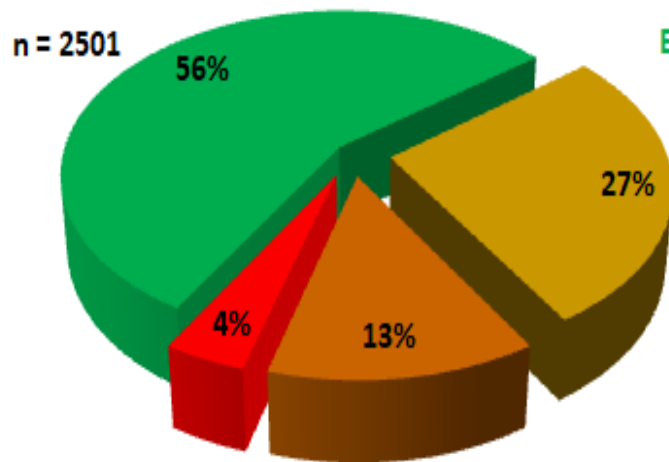
Yasuhiko Kubota, Hiroyasu Iso, Akiko Tamakoshi
Bowel Movement Frequency, Laxative Use, and
Mortality From Coronary Heart Disease
and Stroke Among Japanese Men and Women
J Epidemiol, 26 (5), 242-8, 2016.

The incidence of Bradyenteria (44%) and Euenteria (56%) among physicians

Materials and methods: 2501 physicians aged 25-74 years, 66% women, were examined by chronoenterography, in which the frequency and acrophase of the defecation rhythm were determined. The tendency to obesity, arterial hypertension and the use of laxatives, as well as the level of anxiety and depression were determined. We compared the levels of quality of life in people with regular and irregular bowel rhythm.

Results: The number of physicians with Euenteria was 56%, and the number of people with Bradyenteria syndrome was 44%.

Euenteria (7 bm/w) & Bradyenteria (1-6 bm/w)



Euenteria - Regular (daily) Rhythm

Bradyenteria - Irregular Bowel Rhythm

Mild (27%) and Moderate (13%)

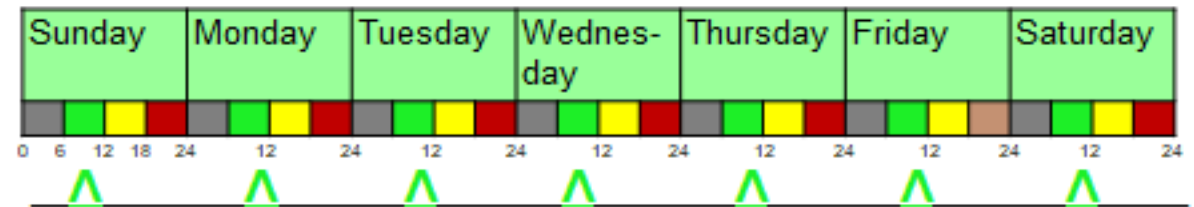
Bradyenteria were 10 times more common than

Severe Bradyenteria (4%)

- Euenteria 7 bm/w
- Bradyenteria 5-6 bm/w
- Bradyenteria 3-4 bm/w
- Bradyenteria 1-2 bm/w

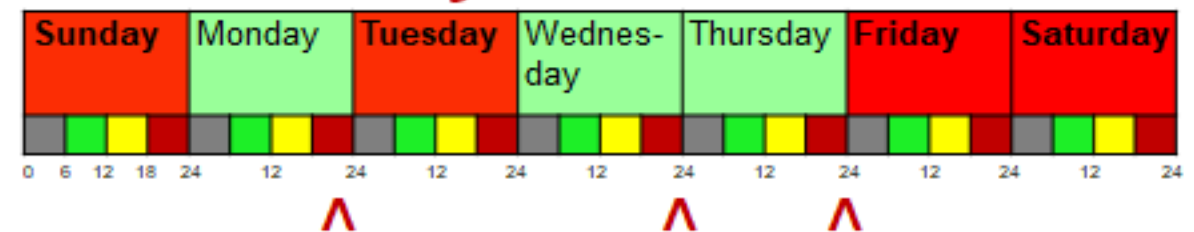
Shemerovskii K.A. et al.
UEG Week 2019, October 19-23,
Barcelona - Spain, P0522.

Euenteria (7 bm/week)



Morning Defecation is link with everyday Bowel Habit (7 bm/week)

Bradyenteria (3 bm/week)



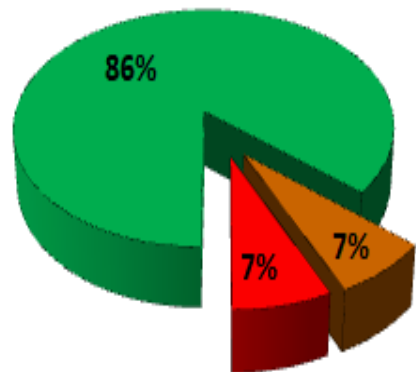
Evening defecation is link with not everyday stool (3 bm/week)

Bradyenteria increases the Risk of **Obesity** & **Hypertension**

Results: Three stages of bradyenteria syndrome severity were revealed: stage I (**mild**-with a frequency of defecation 5-6 bm/week) - 61% of patients; stage II (**moderate** – 3-4 bm/w) – 30% of patients; stage III (**severe** – 1-2 bm/week) – 9%. Bradyenteria syndrome increased the risk of obesity and hypertension by almost 3 times.

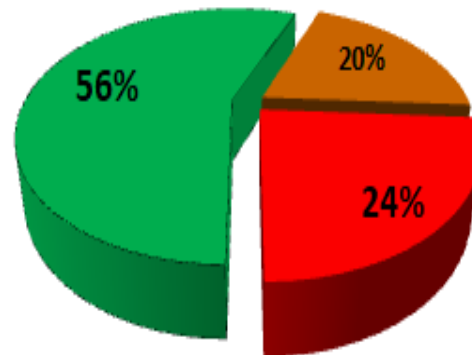
Bradyenteria increases the risk of Obesity

Euenteria 7 bm/w



■ BMI < 25 kg/m² ■ BMI > 25 kg/m² ■ BMI > 30 kg/m²

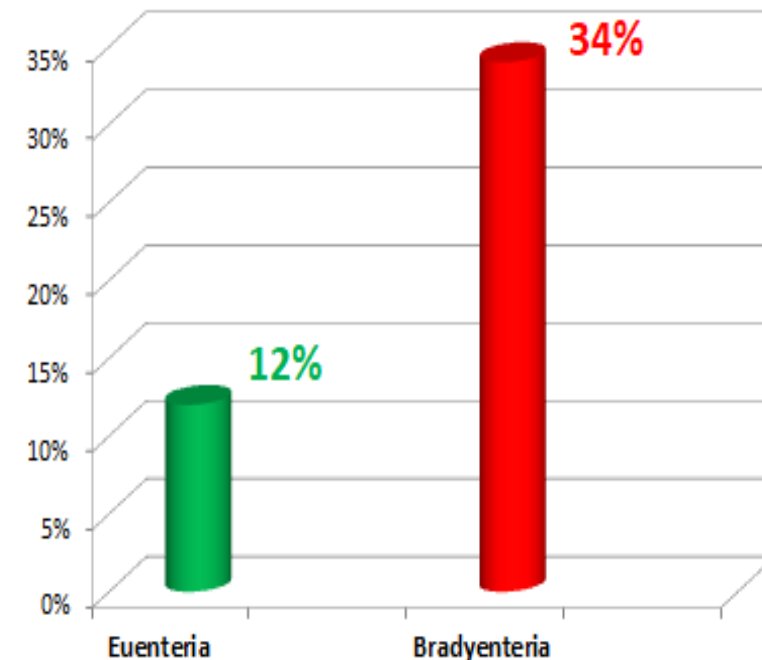
Bradyenteria 1-6 bm/w



Bradyenteria increases the risk of Obesity by 3.4 times

Shemerovskii K.A., Mitreikin V.P.
Irregular bowel habit increases the risk of obesity.
European Gastroenterology Journal, 2015, (55), A504, p.1223

Bradyenteria syndrome increased the risk of Hypertension



Hypertension Risk at Euenteria (7 bm/w) was **12%**

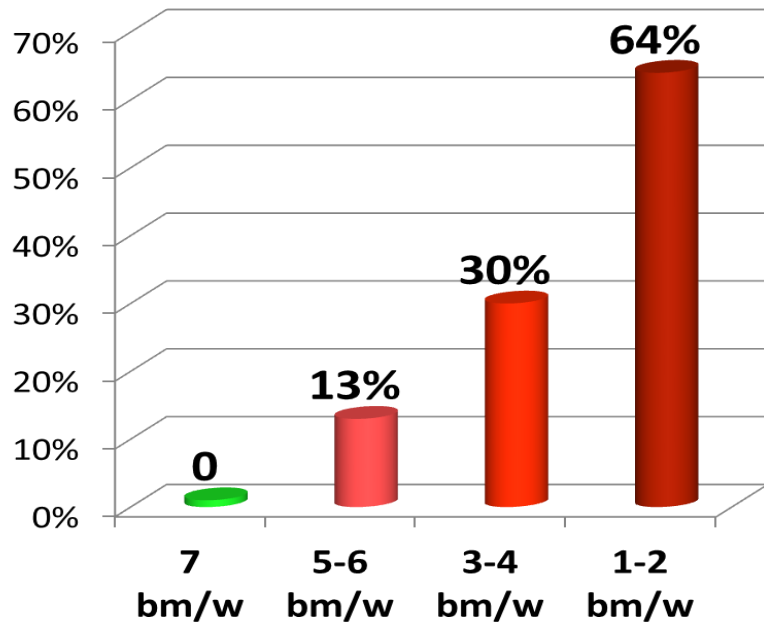
Hypertension Risk at Bradyenteria (1-6 bm/w) was **34%**

Bradyenteria increased the risk of Hypertension by 2,8 times

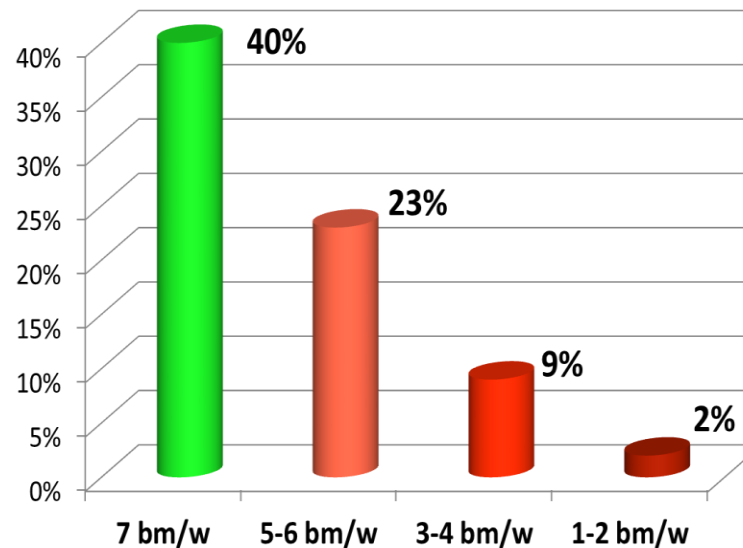
Shemerovskii K.A.
Scientific Notes, Vol.XVI, №4, 2009, 136-139.

Bradyenteria Syndrome increases the risk of taking Laxatives and lowers the Quality of Life

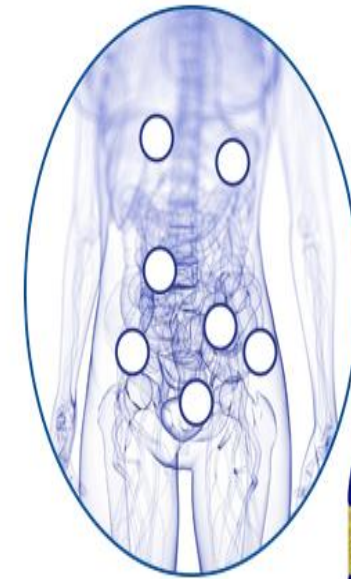
Laxatives, n (%)



High level of Quality of Life, n (%)



For Future Medicine



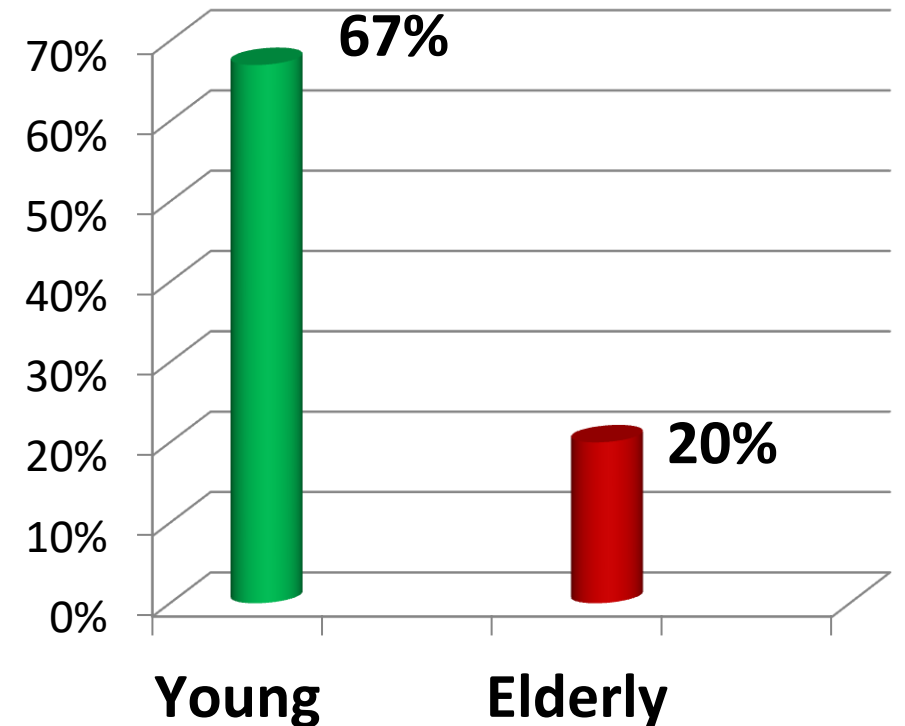
Mineral water
Bilinska Kiselka
promotes
the transition
of Bradyenteria
to Euenteria
increasing
Quality of Life

Conclusion: Early diagnosis and therapy of Bradyenteria Syndrome, diagnosed by the frequency of the bowel movement rhythm, can help reduce the risk of cardiovascular morbidity and mortality, and improve the Quality of Life.

MINERAL WATER RESTORES THE RHYTHM OF DEFEICATION

Number of patients, age, gender	Defecation frequency (bm/week)	Number of patients before drinking water	Number of patients after drinking water	Efficiency (7 bm/week) %	Side effects
Young (n= 30) 24-29 years old, 21 w : 9 m	5-6	22	4	(20:30) 67%	Headache – 1 woman
	3-4	8	6		Body weight loss- 1 woman
Elderly (n=30) 62-84 years old, 22 w : 8 m	5-6	13	10	(6:30) 20%	Bedwetting - 1 man
	3-4	9	7		
	1-2	8	7		

Efficiency of restoration of normal defecation Rhythm



Timely therapy of the Young is 3 times more effective than untimely therapy in the Elderly.

Conclusions:

- 1) Early diagnosis and therapy of Bradyenteria Syndrome, diagnosed by the frequency of the bowel movement rhythm, (lower than 7 bm/w) can help reduce the risk of cardiovascular morbidity and mortality, and improve the Quality of Life.
- 2) The effectiveness of normalization of the stool rhythm by drinking natural mineral water Bilinska Kiselka in young patients was 67% and in elderly patients was 20%.
- 3) **Timely therapy of the young is 3 times more effective than untimely therapy of the elderly.**

References:

1. **Honkura K., Tomata Y., Sugiyama K.** et al. Defecation frequency and cardiovascular disease mortality in Japan: The Ohsaki cohort study. *Atherosclerosis*. (2016). N246. P. 251–256.
2. **Kubota Y., Iso H., Tamakoshi A.** Bowel Movement Frequency, Laxative Use, and Mortality From Coronary Heart Disease and Stroke Among Japanese Men and Women: The Japan Collaborative Cohort (JACC) Study. *J Epidemiol*. (2016) May 5;26(5):242-8.
3. **Shemerovskii K. A., Seliverstov P. V., Bakaeva S. R.** Screening of bradyenteria, laxatives and quality of life. *Russian Journal of Gastroenterology, Hepatology, Coloproctology*, 2020, No. 5, Volume 30, 272, 77.
4. **Shemerovskii K. A.** Bradyenteria as a predictor of cardiovascular pathology. *Translational Medicine*, 2020, Adj. No. 2, p. 245.
5. **Shemerovskii K.A., Mitreikin V.P.** Irregular bowel habit increases the risk of obesity. *United European Gastroenterology Journal*. 2015. № A504. P.1223.