

Symptoms of Hemorrhoids Diminished Significantly or Ceased Completely by Changing from the Sitting to the Squatting Defecation Position

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DEAR EDITOR,

Studies have showed that there is significantly more straining during defecation in the sitting position compared to squatting [1]. The major factor of recto-anal continence for solid rectal content is the angle between the rectum and the anal canal, which is on average 90 degrees. Tagart [2] found that the recto-anal angle straightens out in the squatting position. Therefore, the emptying of the rectum in the squatting position takes place through an open recto-anal outlet that alleviates the feces expulsion.

We evaluated the influence of changing from the sitting to squatting defecation position on symptoms of chronic internal hemorrhoids. A trial study was performed by 12 primary care physicians in their family medicine practice.

We recruited 68 patients with chronic internal hemorrhoids. Chronic internal hemorrhoids are defined by bleeding and prolapse but our patients also endured from pain. Six physicians followed the test groups and the other six followed the control groups. In the test groups, patients switched from a sitting to a squatting position during defecation. The attending physicians instructed the patients to defecate

only in the squatting position on the floor of bathroom in the flat container that was provided. In the control groups, patients were given the standard medical treatment. The trial was based on patients' subjective assessment of the symptoms. Patients were asked to define the intensity of their symptoms on a scale of 1–5: non-existent (0), very mild (1), mild (2), moderate (3), and severe (4). This kind of assessment reflects the mathematical expression of patient sensation of the intensity of the symptoms. It is not a new method. The mathematical expression of the severity of any pain is an acceptable method.

The patients were questioned about the changes in the severity of their symptoms 2 weeks following the bowel emptying in the squatting position or medical treatment. The patients in the control group whose symptoms were not relieved switched to a squatting position for defecation thus forming the crossover trial. The scores that were derived from their medical treatment were used as baseline values for the crossover trial. The group comparison revealed that switching from the sitting defecation position to the squatting (test group) reduced the intensity of the bleeding and pain significantly greater than the medical treatment (control group). A paired analysis revealed that changing from the sitting to the squatting defecation position in the crossover trial caused a significant diminishment in the intensities of the bleeding, pain, and prolapse compared to the control. The percentage of patients with the complete cessation of the symptoms was significantly higher in the trial and crossover groups than in the controls.

The squatting defecation position may provide no advantages to patients with inherited morphological abnormalities of the recto-anal outlet, such as immobile perineum or a dynamic recto-anal angle [3]. This small group of patients can be easily diagnosed since they have less than one bowel movement daily. Connell found in a survey among 1055 factory workers only 5.1–9% with less than one

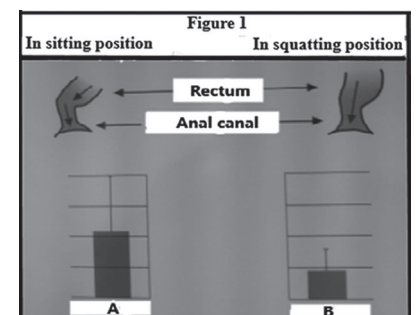
bowel action daily [4]. Thus, patients with less than one bowel action per day were not included into the present trial.

Results of the trial are explained by the diminished straining in the squatting position compared to the sitting defecation position, as shown in Figure 1.

Figure 1. Comparing the sitting and squatting defecation positions

[A] The straightening of the recto-anal angle in the squatting vs. the sitting position accordingly to Tagart [2]

[B] Intensity of straining in the sitting position compared to the squatting defecation position accordingly to Sikirov [1]



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