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EFFECT OF GINGER OIL ON CONSTIPATION INDIVIDUALS

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ABSTRACT

Constipation is a common chronic condition consisting of abdominal pain with changes in bowel habits. Ginger root is the rhizome of the perennial plant *Zingiber officinale* Roscoe. Ginger contains 1–3% of oils. Ginger dosing is often standardized according to gingerol content which is assumed to have antiemetic, analgesic, sedative, antibacterial and other physiological effects though other non-volatiles may have some of the same effects. The main aim of this study is to determine the effect of Ginger oil among the constipation population. Sample size of this study was 30 individuals. Participants having constipation problems were randomly selected for this study. Individuals were instructed to apply oil on their abdomen twice in a day for 30 days duration. Stool nature, frequency of faeces were noted before and after application of oil. Data were collected and tabulated. 60% got benefited after the usage of Ginger oil and 30% of the study population had slight changes in their bowel movement. 10% of them felt no change. From this study, it is evident that ginger oil has an effect on bowel movement and thereby it is effective among constipation individuals.

INTRODUCTION

Constipation refers to the passage of hard stools where it is actually described as incomplete evacuation and excess time spent in irregular unsuccessful defecation. It is a common chronic condition consisting of abdominal pain

with changes in bowel habits. Ginger root is the rhizome of the perennial plant *Zingiber Officinale* Roscoe. Ginger contains 1– 3% of oils. Functional constipation and Abdominal migraine (FGIDs) are common in children and adolescents [1]. Ginger dosing is often standardized according to gingerol content which is assumed to have antiemetic, analgesic, sedative, antibacterial and other physiological effects though other non-volatiles may have some of the same effects [2,3]. It can cause all sorts of health issues, as it disturbs the person physically and physiologically. The most common causes are Irritable bowel movements, abdominal pain, nausea, bleeding. These problems occur due to lack of proper diet, travel, over usage of laxatives. Sometimes this condition even affects the Central Nervous System (CNS) where this remains intact [4]. Ginger oil facilitates evacuation of Bowel movement. It is a natural Ayurvedic medicine which has a laxative effect. It facilitates the elimination of toxic substances. This ginger oil is used to cure digestion ailments and appetite disorders. It also enhances the appetite, clears the digestive tract and reduces the inflammation in the abdominal region to ease the digestion [5]. It is an antioxidant and has pre oxidative inhibition properties to prevent pre oxidative damage [6,7]. As the Ginger oil has wide pharmacological effects, it is considered as a more valuable tool to cure gastrointestinal and respiratory diseases. Compounds such as Fe, Mg, Ca, vitamin C, flavonoids, phenolic compounds (gingerdiol, gingerol, gingerdione and shogaols), sesquiterpenes, parasols have long been used as an herbal medicine to treat various symptoms [8]. Ginger oil acts as a warming herb and increases the heat generation in the body. This helps to speed up the process of digestion. Ginger oil is an analgesic, sedative, antibacterial and has other physiological effects to maintain the homeostasis. Usage of Ginger oil is considered to be more safe and it is also clinically approved [9]. Ginger oil has also been used as naturopathy due to their potential anti microbial activity against different microbial pathogens [10]. The main aim of the study is to evaluate the effect of Ginger oil on Constipation and this study has been carried out among random individuals suffering from constipation.

MATERIALS AND METHODS

Thirty individuals suffering from constipation were randomly selected as a sample size for the study. This study was being carried among the study population age grouped 20-40 years. These individuals were selected and given ginger oil. They were instructed to apply the oil on their abdominal region twice in a day for 30 days duration. Stool nature, frequency of faeces were noted before and after application of oil. Datas were collected and tabulated.

RESULTS AND DISCUSSION

In this study, ginger oil has created an impact on constipation and it's more effective was noted in bowel movement. In this study, people with hard stools and abdominal pain had simultaneously been taken into consideration. As some of them have only abdominal pain as a major factor. Abdominal pain is one of the major factors in the constipation related health issue. Thirty individuals were considered to execute the study. Twenty three people were identified with abdominal pain before the study was carried out. After applying oil for 30 days, it was to only 7 individuals having the abdominal

pain (fig 1). Secondly, hard stool was considered a major factor. It was noted that 28 people were suffering from hard stool before the treatment. But, later after the treatment the number reduced to 15. So, this showed the effect of ginger oil on hard stool (fig 2). There was a gradual decrease in the hard stool where the study finally concluded that 60% of the individuals were benefited from the treatment and 30% of the study population have been reported with slight changes. So, the majority of the study population felt the difference after using ginger oil. Surprisingly, 10% of the study population had never felt any change in their bowel movements (fig 3).

Other research articles predominantly revealed that the use of ginger oil experienced significant reduction in the symptoms of abdominal pain, hard stool and irregular bowel syndrome which was homogenous to our study result. Ginger oil has been used as traditional medicine for many centuries. As this ginger oil contains vitamins such as thiamine, riboflavin, niacin and vitamin C very much useful in treating constipation [11]. It acts as an antifatulent or carminative to reduce gas and bloating [12] but rather, ginger's active principles act directly on the gastrointestinal tract [13,14]. A study was conducted among college students, who were self rated as having extreme or very high susceptibility to motion sickness were taken as a study sample and given treatment using ginger oil. The study also concluded that ginger was superior to dimenhydrinate in preventing motion sickness. This study result was similar to our study [15]. Another study performed by Yamahara J et al showed that Ginger administration (1 g) had also been found to be effective in reducing postoperative nausea and vomiting prior to elective gynaecological laparoscopy. The ginger effect was similar to that found in metoclopramide with 100 mg. Additionally, a double-blind study in 27 pregnant women with morning sickness found that 250 mg oral administration of powdered ginger was 4 times daily [16]. These were the similar studies performed in various parameters to prove ginger oil as a more effective component in curing constipation.

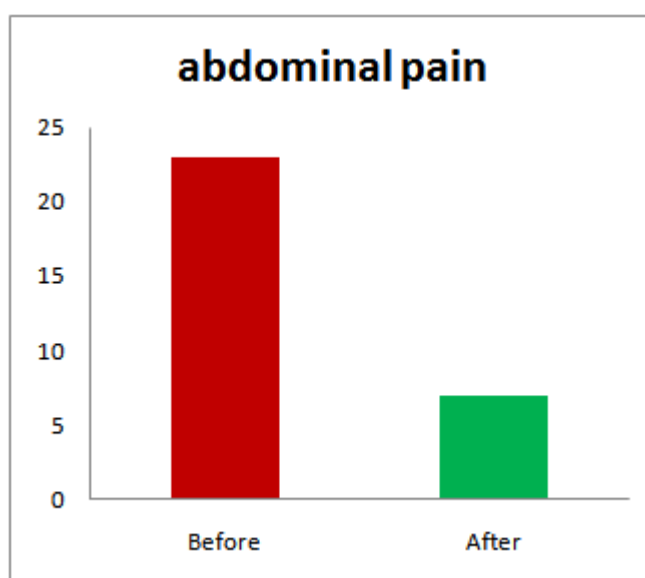


Figure 1: Bar graph representing the abdominal pain before and after using ginger oil. X axis represents the before and after using oil. Y axis represents the number of days.

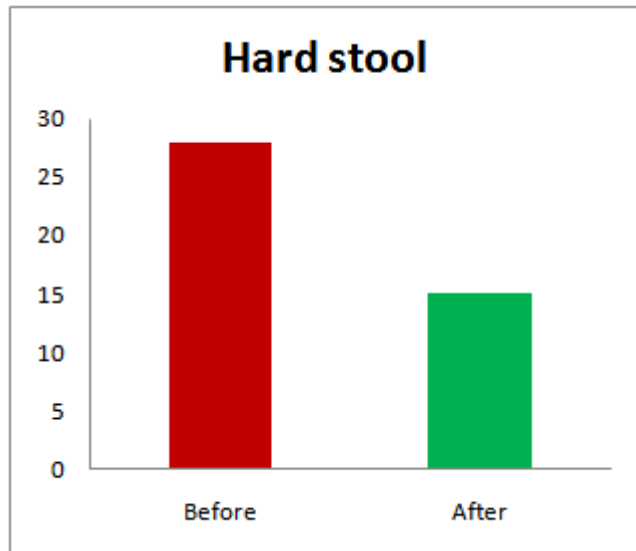


Figure 2: Bar graph representing the hard stool before and after using ginger oil. X axis represents the before and after using oil. Y axis represents the number of days.

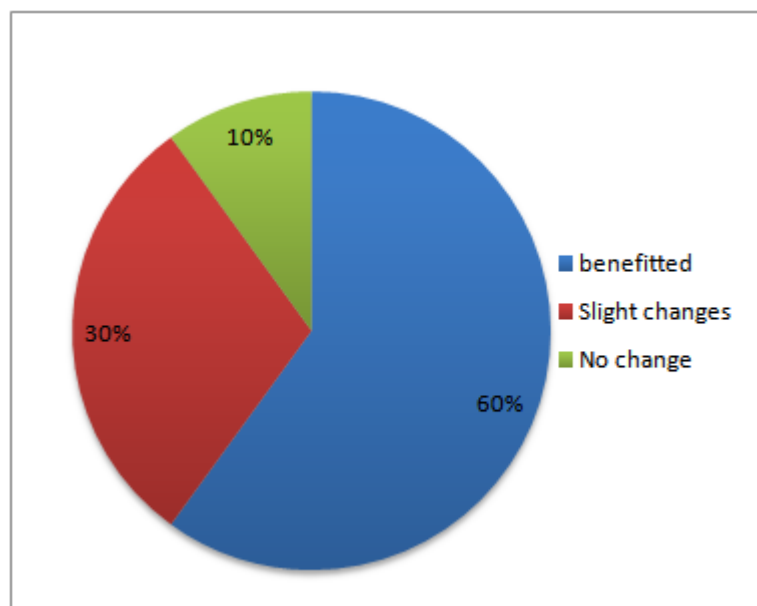


Figure 3: Pie chart representing the overall effect of ginger oil. 60% got benefitted after the usage of ginger oil (blue), 30% of the study population felt slight changes and 10% of them felt no change (green).

CONCLUSION

From this study, it is evident that ginger oil has a positive effect on bowel movement and thereby it is effective among constipation individuals. 90% of individuals felt it was a more beneficial treatment. So this study may help people to overcome constipation problems.

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CONFLICT

Conflict of interest declared as none

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