

# Research Progress on Causes of Hemorrhoids in Pregnant Women and Diet Nursing

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**Abstract:** The incidence of hemorrhoids in pregnant women is relatively high, which generally occurs in the second trimester of pregnancy. The development of the fetus at this stage causes certain damage to the pelvic cavity, intestine, inferior vena cava, portal vein, etc., affects the venous return, and causes anal swelling and pain, bloody stool and other problems. Once women get sick in pregnancy, the treatment is more difficult, which has a greater impact on the safety of pregnant women and fetus. Studies have shown that diet has a certain impact on the occurrence of the disease, so based on the analysis of the causes of hemorrhoids in pregnant women, we should formulate a scientific diet intervention plan to improve the comprehensive intervention quality of the disease.

**Keywords:** Pregnant Women; Hemorrhoids; Causes of Occurrence; Diet Care

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## Introduction

Hemorrhoids are a soft vein mass produced by the blood stasis of the rectum and the anal plexus. The incidence rate in the population is 50-70%. It is a common disease type in the anorectal department, and can be found in all ages, which may cause certain effects on normal life. The incidence rate of hemorrhoids is significantly higher than that of non-pregnant women. This is because women need to increase the blood flow in the pelvic cavity during pregnancy to maintain the nutritional supply of the fetus. With the continuous growth of the fetus, the uterus is gradually enlarged, the pelvic cavity will be subjected to compression, and the pressure of the portal vein, inferior vena cava and intestine will increase. Venous blood return and fecal excretion will be blocked, eventually leading to the emergence of hemorrhoids. For pregnant women with hemorrhoids, the occurrence of the disease is the result of comprehensive effect, and diet nursing plays a positive role in the treatment of the disease. This paper analyzes the causes of hemorrhoids in pregnant women and the research progress of diet nursing, as follows.

## 1. Analysis of the causes of hemorrhoids in pregnant women

More than 70% of pregnant women are threatened by hemorrhoids. Because the rectum does not have vein valve, and it is difficult to return blood smoothly. Blood deposition will cause the vein plexus to bulge and curl up. If the external stimulation is given to pregnant women, the formation of hemorrhoids will be further promoted, including:

### 1.1 Physiological factors

(1) Uterine compression: during pregnancy, with the growth and development of fetus, the space needed gradually increases, and the volume of uterus increases, which causes compression to the pelvis. The venous pressure of pregnant women is in a high state, and the blood vessels are relatively relaxed. In this state, the blood flow rate of the body will slow down and cannot be returned to the heart position in time. However, the vein near anus is not smooth for a long time, and a large number of blood gathered in it will cause the vein plexus to bulge and curl up, showing swelling and swelling. Shi Wenjun <sup>[1]</sup> pointed out that the prevalence of functional constipation in pregnant women was 16.18%, which was at a high

level and needed scientific intervention.

(2) Progesterone increase: the hormone level of women during pregnancy is also changing greatly, progesterone index has significantly improved, while progesterone has a certain influence on the elasticity of vein vessels, which makes it appear a sharp decline. The incidence of varicose is significantly increased, and it is also a risk factor for hemorrhoids.

(3) Constipation: if pregnant women have long-term constipation history and poor gastrointestinal function, the symptoms are more serious in pregnancy due to their own reasons. Once defecation is not smooth, it will make efforts, then increase the venous pressure near the anus, and further aggravate hemorrhoids. Hu Liqin <sup>[2]</sup> pointed out that constipation is an important factor of hemorrhoids in pregnant women.

## **1.2 Environmental factors**

### **1.2.1 Age**

Women's physical function also changes with age. There are some problems in the blood flow rate, body metabolism and underlying diseases of the elderly pregnant women <sup>[3]</sup>, which leads to a certain degree of increase in hemorrhoids incidence rate.

### **1.2.2 Pre pregnancy BMI value**

If women are in the obesity stage before pregnancy, their blood viscosity is high, and fat will have a greater impact on blood circulation. At the same time, diet tends to be high in protein and fat, which increases the burden of gastrointestinal function and makes them less sensitive <sup>[4-5]</sup>. A higher BMI value will be accompanied by a higher body weight, and the pressure on the anus will increase, which will also lead to a higher incidence of disease.

### **1.2.3 Working factors**

For some women who have been engaged in light physical labor for a long time, they are in a sedentary state for a long time, which hinders the blood circulation, causes congestion and varicose veins around the lower rectal mucosa and anus, and forms hemorrhoids <sup>[6]</sup>.

## **2. Diet nursing measures for pregnant women with hemorrhoids**

The occurrence of hemorrhoids is closely related to blood flow rate, fetal development and constipation, which can be adjusted through corresponding diet. Therefore, dietary nursing measures have a positive effect on hemorrhoids during pregnancy

### **2.1 Drinking honey water correctly**

Pregnant women can be advised to drink 300ml warm honey water on an empty stomach every morning. Honey is a kind of material with fructose and glucose as the main components. It contains essential amino acids, protein, vitamins, etc. which has high nutritional value and has the effect of moistening intestines and defecating. Studies have shown that adults can have the problem of malabsorption of sugars after eating honey, and the incomplete absorption of fructose can improve constipation. Zhang Lili pointed out in her research that after diet nursing, the rate of no hemorrhoids in the diet intervention group (97%) was significantly higher than that in the routine nursing group (74%), which shows that diet nursing measures play a certain role in controlling the occurrence of hemorrhoids.

### **2.2 Moderate consumption of fruits**

Pregnant women can be advised to eat fruit reasonably, and eat an apple or an appropriate amount of pitaya 30 minutes before lunch and dinner. Pitaya is a kind of fruit with low calorie and high vitamin content, which is rich in water-soluble dietary fiber. After eating, it can decompose a large number of fatty acids, lactic acid and fruit acid, promote gastrointestinal

peristalsis, and have the effect of moistening intestines and defecating; Apple is a kind of food rich in vitamins and soluble dietary fiber. It is easy to ferment bacteria in the inner colon, promote the growth of intestinal flora, and enhance the vitality of the intestinal tract, in order to promote the softening of stool, and intervene hemorrhoids. Wang Guixiu pointed out that after dietary care, pregnant women have a high score of smooth defecation, a short defecation time, a high frequency of defecation, and a low incidence of hemorrhoids.

### 2.3 Adjusting the diet structure appropriately

Pregnant women need to eat foods containing crude fiber during pregnancy, such as rhizomes and green leaves of plants, which can promote the peristalsis of gastrointestinal tract and soften feces. Keep a full diet of 70% full for each time to prevent the problem of over nutrition and reduce the burden of gastrointestinal tract. We should not blindly supplement nutrition. We should pay attention to the regulation of diet and maintain better gastrointestinal function. Wang Xiaoting pointed out that during the period of 12-38 weeks of pregnancy, the incidence of hemorrhoids in the diet group (2.38%) was significantly lower than that in the non-diet group (28.57%). It can be seen that diet nursing has a good preventive effect on the occurrence of hemorrhoids, which can effectively reduce the incidence.

### 3. Conclusion

Pregnant women are the group with high incidence rate of hemorrhoids. The causes of diseases are analyzed, including 2 aspects, physiological factors and environmental factors. Physiological factors are uterine compression, progesterone rise and constipation. The environmental factors were age, BMI before pregnancy and work. Based on the analysis of the causes of the disease, dietary intervention measures should be formulated to adjust constipation by drinking honey water correctly and eating fruits appropriately, and adjust the body circulation and gastrointestinal function by adjusting the diet structure properly, so as to realize the scientific prevention and control of the disease, and the effect is good.

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