Gingivitis is an inflammatory condition of gingival tissue and caused by the accumulation of dental plaque. Green tea (*Camellia sinensis*) is a plant matter that has been shown to inhibit the growth of acidogenic bacteria and the formation of dental plaque. This study aimed to evaluate the effects of green tea extract on pH and volume of saliva of gingivitis patients. The subjects were 30 male gingivitis patients, 18-25 years old. The subjects were divided into 3 groups according to mouthrinse used (0.25% and 0.5% green tea extract, and 0.1% hexetidine as positive control). The subjects were instructed to gargle during five consecutive days in the morning and at night with 5 ml of the mouthrinse for 30 seconds. The data were taken in the beginning and at the sixth day. Data for salivary volume and pH before and after gargle were compared using MANOVA (p<0.05). The results showed significant differences in salivary pH, suggesting that green tea extract can increase the salivary pH of gingivitis patients, and that the 0.5% concentration was the most influential.