## Abstract

Enteral feeding (EF) is common for patients with different medical health problems, the use of gastric residual volume (GRV) is one of the most nursing practices for monitoring EF. In the nursing literature, there is a wide variation regarding whether the gastric aspirate should be returned to the patient or discarded. Therefore, the aim of the current study was to determine the effect of returning versus discarding gastric aspirate on the occurrence of gastric complications and comfort out comes on enteral feeding patients. A sample of 44 patients completed the study divided randomly into two groups, the control group who received the routine hospital care which was discarding all gastric residual aspirate, and the study group who received returned gastric aspirate up to 250 ml, all patients were followed up for 7consecutive days. The study was conducted in two medical departments of one of the Ministry of Health Hospitals at Center region (Kingdom of Saudi Arabia). Four tools were applied for the study, socio-demographic and medical data sheet, gastric and associate complications with tube feeding sheet, electrolyte and glucose monitoring sheet & comfort outcomes sheet. The study results showed that there was no statistical significant difference between study and control groups in relation to gastric residual volume, feeding intolerance, aspiration pneumonia, electrolytes monitored (sodium& potassium), glucose level, temperature &blood pressure and oxygen saturation in the 1st& 7th day. In addition, the results showed that there was a statistical significant difference between study & control groups in relation to gastric emptying delay in the 7thday, the study group had less mean level than control group, moreover, there was a statistical significant difference in pulse and respiration among control group before and after feeding procedure. Based on the study results, it is recommended to return gastric aspirate up to 250 ml to the patients as it had no indicated risk for gastric and associate complications as well as comfort outcomes when compared to discard gastric aspirate. In addition, further researches can be done to measure different amounts of returning gastric aspirate and its effect on patient's outcomes.

**Key words**: enteral feeding, gastric residual volume, gastric emptying delay, comfort outcomes, returning versusdiscarding gastric aspirate& gastric complications