The influence of postural changes on gastroesophageal reflux and barrier pressure in nonfasting individuals

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There is controversy regarding optimal body positioning (i.e., head-up, head-down) in awake nonfasting individuals to minimize the risk for pulmonary aspiration of gastric contents as the result of gastroesophageal reflux (GER). In the present study, we investigated GER and intragastric-esophageal barrier pressure by means of multichannel intraluminal impedance measurement and intragastric-esophageal manometry in awake, nonfasting volunteers randomly positioned in a 20 degrees head-up position, the supine position, and a 20 degrees head-down position. No significant difference among positions was found with respect to number of GER episodes per person (0/1/1) or intragastric-esophageal barrier pressure (15.6/19.6/19.4 mm Hg). We conclude that specific body positioning is useless in the prophylaxis of GER in awake nonfasting individuals. IMPLICATIONS: Tilting of nonfasting individuals to the head-up or head-down position recommended for prevention of regurgitation of gastric contents does not influence the frequency of gastroesophageal reflux.

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