

Esophageal pH monitoring and the effect of prepulsid in premature infants with gastroesophageal reflux

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Abstract

AIM: To investigate the incidence and clinical manifestations of gastroesophageal reflux (GER) in premature infants and the therapeutic effects of prepulsid on GER.

METHODS: The esophageal pH were monitored continuously for 24 ± 3 h in 8 premature infants who were born in our hospital. Moreover, GER positive cases were treated with prepulsid. Of 8 patients (4 male, 4 female), mean gestational age was 33.1 ± 2.8 wk and mean birth weight was 1535.63 ± 577.19 g. The clinical manifestation included vomiting, difficulty to feed, retardation of weight, apnea. The patients whose percent of time of esophageal pH < 4 in 24-h

were higher than the normal value in same age would be considered GER positive and be treated with prepulsid (0.2-0.5 mg/kg, bid) and be reexamined 10 d later.

RESULTS: Five of 8 premature infant showed GER positive. The symptoms disappeared after treated for 2-3 d, the increasing of body weight of one patient increased from 10 g/d to 30 g/d from the second day of treatment. The percent of time of esophageal pH < 4 in 24-h were significant difference before and after treated (37.66 ± 13.83 and 7.26 ± 5.80, $t = 4.531$, $P < 0.01$).

CONCLUSION: The effect of prepulsid on GER in premature infants was remarkable and no side effects were seen. The monitoring of continuously esophageal pH for 24-h was better mean for determining GER in premature infants, which can done easily and with the advantage of brief and safe.

Key words: Esophageal pH monitoring; Prepulsid; Premature infant; GER

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