

EFFECT OF ABDOMINAL MASSAGE PHYSIOTHERAPY ON GASTROINTESTINAL TRANSIT TIME IN VLBW INFANTS - RANDOMIZED CONTROLLED TRIAL

W. Mihatsch

Pediatrics, Deaconry Hospital, Schwaebisch Hall, Germany

Background: In preterm infants abdominal massage physiotherapy has been suggested to increase feeding tolerance.

Aim: Aim of the present trial was to investigate the effect of regular abdominal massage physiotherapy in VLBW infants on gastrointestinal motility.

Methods: In a single centre randomized controlled cross over design trial 20 VLBW infants at the time of achieving full enteral feedings (feeding volume 120 - 150 ml/kg/d) were randomly allocated by sealed envelopes to receive 6 times a day 4 minutes of GI massage physiotherapy for one week in addition to the routine care or not. GI motility was assessed at the end of each study period by measuring gastrointestinal transit time (GTT) using carmine. GTT was defined as the time from feeding carmine red stained milk to the appearance of carmine red stained stool in the diaper. The attending nurse checked the diapers at least every 1-2 hours. Data is given as median (min-max).

Results: 20 VLBW infants with birth weight of 1175g (690-1460) on full enteral feeding were studied. GTT was 0.625 days (0.292-1.375) with abdominal massage and 0.625 days (0.167-1.49) without.

Conclusion: In VLBW infants on full enteral feeds regular abdominal vibrating massage physiotherapy did not have an effect on gastrointestinal transit time. The data does not exclude that abdominal physiotherapy by other means or during the time of feeding advancement may have clinical relevant beneficial effects.