Asthma News This Week

March 15, 2019

CONTENTS

JOURNAL articles

Abuabat, F., et al. The role of oral magnesium supplements for the management of stable bronchial asthma: a systematic review and meta-analysis. *npj Primary Care Respiratory Medicine.* Dec 2019; 29(1): 4. doi: 10.1038/s41533-019-0116-z

Asthma is a chronic lung disease characterized by airway inflammation and hyper-responsiveness of airway smooth muscles. There is growing evidence that magnesium may have a role in managing asthma through its dual effect as an anti-inflammatory and bronchodilating agent. To assess the efficacy of oral magnesium supplements in chronic asthmatic patients. In addition to searching through Clinicaltrials.gov/ and references for oral magnesium supplement studies, we performed a database search in Medline, CINAHL, CENTRAL, and Embase. We contacted the authors of the included trials to ask for additional information. We included randomized controlled trials that compared oral magnesium supplements versus placebo, in addition to standard asthma treatment in mild-moderate asthmatic adults and children (older than 6 years). Two reviewers independently performed the study selection, data abstraction, and the assessment of the risk of bias. Eight trials at moderate risk of bias enrolling a total of 917 patients were included. Oral magnesium improved FEV1 at week 8 (5.69 (L/min); 95% CI: 1.92, 9.46; I 2 : 45%). There was no significant improvement in FEV1 at other follow up periods. There was no significant change in FVC, Methacholine challenge test, the frequency of bronchodilator use, or symptoms score. There were no data on mortality or quality of life. Oral magnesium supplements may lead to improvement in FEV1 that was only demonstrated at eight weeks; but no effect on any other outcome. Until future evidence emerges, oral magnesium

cannot be recommended as adjuvants to standard treatment for mild to moderate asthmatic individuals.

In the NEWS

Pratt, Elizabeth. Vitamin D May Help Ease Children's Asthma Caused by Air Pollution. *Healthline*. March 14, 2019.

Healthday News. Prenatal High-Dose Vitamin D Not Linked to Asthma at Age 6. *Physician's Weekly*. March 14, 2019.

Klass, Perri. Using an Asthma Inhaler Correctly. *The New York Times.* March 11, 2019.

Barry-Jester, Anna Maria. Unraveling Childhood Trauma. *Kaiser Health News.* March 6, 2019.

University of California—Irvine. Engineers develop wearable respiration monitor with children's toy. *Science Daily*. Feb 14, 2019.