OBJECTIVES: Limited evidence exists on the risk of falls/fractures with use of anticholinergic medications in the elderly. This study examined the risk of falls/fractures associated with anticholinergic medication use. METHODS: A nested case-control design was conducted using regional Medicare Advantage Plan database. The base population included individuals aged >65 years, who survived during the entire study period (2005-2013). A total of 1,480,678 persons were identified as having at least one institutional and one outpatient claim in the first 6 months (January-June 2009) and no event of falls/fractures during the first 6 months (Base Period). Cases were identified as patients who experienced incident diagnosis of a fracture after January 2009 (V42, 148pmol/L), low normal (148-221pmol/L), and normal (>221pmol/L). The evidence of demonstrating the efficacy of using ST is still lacking. The association was not significant (OR 0.61-1.54). CONCLUSIONS: Use of proton pump inhibitors (PPIs) and metformin have emerged as potential risk factors of vitamin B12 deficiency in the elderly. The superiority of ST over STT on the effect of Helicobacter pylori eradication was demonstrated, RR 1.24 (95% CI 1.14, 1.36). No heterogeneity (I² = 0) and publication bias (funnel plot was symmetrical) in the subgroup analyses. ST remains superior to STT regardless of the length of the STT (7 days or 10 days) (RR 1.24, RR 1.23) as well as the type of medicine used as a part of ST (metronidazole or tinidazole) (RR 1.24, RR 1.26). CONCLUSIONS: The study indicated sequential therapy is superior to standard therapy for the eradication of Helicobacter pylori infection in children. More large RCTs are warranted to further confirm the efficacy due to the limited number of published studies.

PH6 COMPARING THE EFFECT OF SEQUENTIAL THERAPY WITH TRIPLE DRUG THERAPY FOR HELICOBACTER PYLORI ERADICATION IN CHILDREN: A SYSTEMATIC REVIEW AND META-ANALYSIS

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OBJECTIVES: To evaluate the efficacy and safety of sequential therapy (ST) versus triple drug therapy (TDT) for Helicobacter pylori eradication in children. The evidence of demonstrating the efficacy of using ST is still lacking. The aim of this study was to conduct a systematic review and meta-analysis comparing the efficacy of ST versus STT for the treatment of Helicobacter pylori infection in children. METHODS: We used the keywords such as “Helicobacter pylori”, “H pylori”, “infection”, “sequential therapy”, “triple drug therapy” “children” and searched Cochrane library, Pubmed and Google Scholar for all the relevant randomized controlled trials (RCTs), comparing the efficacy of two treatments (ST: proton pump inhibitor (PPI) + 1 antibiotic for 5 days followed by PPI + 2 antibiotics for another 5 days), and STT (PPI + 2 antibiotics for 10 days). The trials which were not included from RCTs and Review Manager was used to estimate the pooled risk ratio (RR). RESULTS: Five full text studies were included in the meta-analysis. They were published from 2005 to 2017. None of the five studies were of good quality ( Jadad score ≥ 3). The superiority of ST over STT on the effect of Helicobacter pylori eradication was demonstrated, RR 1.24 (95% CI 1.14, 1.36). No heterogeneity (I² = 0) and publication bias (funnel plot was symmetrical) in the subgroup analyses. ST remains superior to STT regardless of the length of the STT (7 days or 10 days) (RR 1.24, RR 1.23) as well as the type of medicine used as a part of ST (metronidazole or tinidazole) (RR 1.24, RR 1.26). CONCLUSIONS: The study indicated sequential therapy is superior to standard therapy for the eradication of Helicobacter pylori infection in children. More large RCTs are warranted to further confirm the efficacy due to the limited number of published studies.

PH7 FOLLOW-UP OF PSYCHOACTIVE DRUG USE IN NEWLY DIAGNOSED PATIENTS WITH AUTISM SPECTRUM DISORDER (ASD) IN CANADA

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OBJECTIVES: To characterize the temporal course of psychoactive drug utilization in a cohort of newly diagnosed autistic individuals. METHODS: A cohort was built using the provincial public health insurance program (RAMQ) databases. Newly diagnosed autistic adults (≥ 5 years of age) diagnosed between 1998 and December 2010, who received one of the RAMQ drug plans in the year preceding cohort entry were excluded. Demographic and clinical patient characteristics were assessed at cohort entry. Drug use profiles (anticonvulsants, anxiolytics, antidepressants, anxiolytics, ADHD drugs) were evaluated over the first 5 years of age groups and variations over time were analyzed using generalized estimating equations (GEE) models. RESULTS: A cohort of 2,989 subjects was identified (male: 80.2%; median age: 6 years). Prior to ASD diagnosis, 35.8% received at least 1 psychoactive drug. At 1 year of follow-up, 44.9% of participants were receiving at least 1 psychoactive med.