

Iron Deficiency Anemia due to Long-Term Proton Pump Inhibitor Use in pregnancy Case Series

Objective:

Though many case reports and a community-based case control study showed the association of iron deficiency anaemia due to long term PPI use in non pregnant adult . However, the association between PPI use and iron deficiency anemia in pregnant women remains controversial and iron deficiency anaemia has enormous impact on maternal mortality and morbidity in low resource country . Eventually we are reporting the cases of 5 pregnant women who developed iron deficiency anemia after 2 to 10 years of continuous PPI use.

cases

5 pregnant ladies who had been taking omeprazole, a proton pump inhibitor (PPI), for 2 to 10 years before pregnancy and whole antenatal period developed iron deficiency anemia in third trimester of their first pregnancy. Demographic features were almost similar.

An evaluation of the entire gastrointestinal tract did not reveal any possible causes of gastrointestinal blood loss and previous menstrual history was not consistent with any heavy menstrual bleeding. Dietary habit was normal, appetite was intact and no symptoms of malabsorption were there. There was no medical or surgical cause that may contribute to IDA

The cause of the iron deficiency was considered to be a reduction in gastrointestinal iron absorption in association with the reduced secretion of gastric acid due to PPI use that causes malabsorption of dietary iron as ferric iron can be converted to ferrous iron only in presence of acidic PH. These cases demonstrate that long-term PPI use before and during pregnancy may cause iron deficiency anemia and should be considered in the differential diagnosis of iron deficiency anemia in long-term PPI users.

Discussion

High prevalence of iron deficiency anaemia is a global concern to reduce maternal mortality as well as morbidity in low resource set up where prevalence of long tem injudicious PPI use is also high. It is important to note that all 5 women had no indications for long term PPI use. Consequently ,if the association between long term PPI use and iron deficiency anaemia in pregnancy can be evidenced by study it would bring a new horizon for reducing maternal mortality and morbidity

conclusion

As long term PPI use can be a cause of iron deficiency anaemia in pregnancy so prospective rondomised clinical trial can be planned to reveal the association and to improve overall women health.