Critique of primary article

Science, Chemistry

CRITIQUE OF PRIMARY ARTICLE B. Purpose of this study The purpose of this study was to obtain information about the measurement of trace metals (zinc, magnesium, copper, manganese, selenium, iron, nitric oxide) and compare it to the severity of sickling of hemoglobin F. C. How was the research/experiment done? What essential values were measured? There were ninety four people chosen for the study. Fifty- nine of the patients had no episodes 3 months prior to the study. The other thirty-five HbAA subjects were blood donors and staff member of the University College hospital. A blood sample of 10mL was taken from each subject. The blood was split up by putting 4mL into ethylene diamine tetra-acetic acid to obtain haemoglobin electrophoresis and estimation of HbF and 6 mL was put into lithium heparin to determine the nitric acid and trace metals. D. What was the conclusion of the research/experiment done? The conclusion is that antioxidant supplement treatment may become helpful in sickle cell disease patients but further research must be done to clarify the observations. E. Commentary The article relates to physiology because it is researching the different levels of trace metals in the blood. The research shows that and antioxidant supplement therapy could possibly help treat the sickle cell disease. This study was based on Nigerian sickle cell disease patients; I feel there should be other studies done on a wider variety of patients with different ethnicity’s to see if the results are similar to these. Sickle cell is very common in Africa, Central America, Panama, and South America these could be other location that the study can be done. After reading the article I feel the research is off to a good start and if additional research is done and the results of this article are duplicated this can be the beginning for a

treatment for sickle cell disease. ARTICLE CITATION Olaniyi, John Ayodele. 2009. Nitric Oxide and trace metals in relation to hemoglobin F concentration in Nigerian sickle cell disease patients. Turkey Journal of Medical Sciences 40 (1): 109-113