**Superiority of Five Discriminant Indices to Distinguish Thalassemia Trait from Iron Deficiency Anemia**

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**Abstract:** The most commonly encountered disorders with mild microcytic anemia are iron deficiency anemia and thalassemia trait. It is important to distinguish between anemia and thalassemia trait to avoid unnecessary iron therapy. Many formula of the index are helpful in distinguishing the two disorders, but none of the method showed high sensitivity and specificity. Hb analysis became the gold standard and also required a type of thalassemia mutation that causes microcytic diagnostic anemia thus providing strong evidence for diagnosis. This review suggested that 5 discriminant indices to distinguish thalassemia trait from Iron Deficiency Anemia are best performed in adults than in children.

**Keywords:** Discriminant Indices, Iron Deficiency Anemia, Thalassemia Trait.

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