

A Study of Iron Status in Pediatric Patients with large complex Vascular Malfomations

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Background: Complex vascular malformations involving the gastrointestinal tract (GIT) are expected to develop iron deficiency.However, the haemoglobin and iron status of vascular anomalies unrelated to GIT were not addressed.

Our aim: was to study the frequency of anemia and iron status among pediatric patients with large/complex vascular malformations without evident bleeding and to correlate the findings with the type, site, severity and extension of vascular malformationand treatment with sirolimus.

Patients and method: A case control study of participants with large complex vascular malformationregistered at Ain Shams University vascular anomalies clinic during the period from June 2019 to June 2020.They were compared to 20 age, sex and socioeconomic standard matched healthy controls. Clinical and laboratory studies for iron status were performed.

Results: fifty percentof patients were anemic versus 65% of the control group (p value = 0.33).As regards iron status of patients, 35% has combined iron deficiency versus 40% of controls, 20% has functional iron deficiency versus 20% of controls, 5% has absolute iron deficiency versus 10% of controls (p value = 0.90). There was no significant difference between patients receiving-sirolimus and who are not as regards anemia and iron status (p value = 0.36, 0.84, respectively).

Conclusion: The frequency of anemia and it s iron related clas-sification are comparable in children with large vascular malformations with no bleeding manifestations to normal children.

Key words: Vascular malformation, Iron, sirolimus, anemia.