IMPACT OF PHOTOTHERAPY ON PLATELET COUNT IN NEONATES WITH INDIRECT HYPERBILIRUBINEMIA

Thesis presented by

Nada Sayed Hashem

M .B .B Ch

In partial fulfillment of the

M.Sc. Degree in Pediatrics

Under supervision of

Prof. Dr. Ahmed Mahmoud Abdelmoktader

Professor of Pediatrics and Neonatology

Faculty of Medicine – Fayoum University

Prof. Dr. Ghada Mohamed Ezzat Ahmed

Professor of Clinical and Chemical Pathology

Faculty of Medicine – Fayoum University

Dr. Wael Sayed

Lecturer of Pediatrics and Neonatology

Faculty of Medicine - Fayoum University

Department of Pediatrics

Faculty of Medicine

Fayoum University

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Abstract

Background: Phototherapy though safe, is not free of side effects. Most of the studies have documented thrombocytopenia as a result of phototherapy. However, few other studies have proven the opposite effect.

Objectives: To evaluate the effect of phototherapy on the platelet count in neonates with non- hemolytic indirect hyperbilirubinemia.

Materials and Methods: A prospective cohort study which involved 120 neonates, who developed indirect hyperbilirubinaemia and required phototherapy during a period of six months from December 2018 to May 2019. Neonates having a base line platelet count of more than 150,000/mm3 were included .Platelet counts were performed on admission, before discontinuing phototherapy and one week later for those how developed thrombocytopenia.

Results: Out of 120 neonates included in study, 9 neonates (7.5%) had thrombocytopenia.The majority of neonates had moderate thrombocytopenia 4 neonates (44,4%).Thrombocytopenia was transient and subclinical with no significant symptoms in all cases.

Conclusions: This study establishes an association of phototherapy with thrombocytopenia in hyperbilirubinemic neonates, there was a significant decline in the mean platelet count after phototherapy**.** There was a significant correlation found between development of thrombocytopenia and birth weight .However, thrombocytopenia was transient and there was no bleeding manifestation.

Key Words: Indirect hyperbilirubinaemia, Neonatal thrombocytopenia, Phototherapy, Platelet count.