THE ROLE OF METFORMIN IN REDUCTION OF PRETERM LABOR IN PATIENTS WITH PCOS

DR.ANAS ALOJAYLI*DR.GUL FATIMA*MR.RAHIM HALOOB*MR. AMAJU IKOMI*

Objective:

Preterm labour is the a leading cause of perinatal mortality and morbidity. It has been pronounce research and studies aiming to reduce the mortality and morbidity as a result of premature births with no or little reduction

Available research shows that women with a diagnosis of PCOS are at greater risk of preterm labour. Continuous intake of Metformin during pregnancy by these women whether they develop gestational diabetes or not, can reduce the rate of preterm labour.

The aim of this observation study is to establish this reduction and to support the future research into this important subject

Methods:

We studied 200 pregnant women with PCOS retrospectively in Basildon University Hospital , a district general Hospital with 4200 deliveries per annum.

The sources were their electronic notes, Biochemical results and pharmacy prescription, between 07/01/2017 and 05/10/2019

Sample Criteria were pregnant women with PCOS. We categorise them in early pregnancy, into two groups according to whether they are on Metformin or without Metformin.

Design:

We assessed the pregnant in the two groups throughout pregnancy.
2 patients (early pregnancy loss) excluded.

200 pregnant women diagnosed with PCOS .
21 of 200 pregnant women with PCOS on metformin treatment and 179 out of 200 pregnant women with PCOS who were not on Metformin treatment.

Results:

Patients with PCOS	Term delivery	Preterm delivery	GDM/pre-existing DM
Total patients. 200	189	9.	41
On Metformin 21	19	1	18
Without Metformin 179.	170.	8.	23

	non diabetic	GDM	Type I ,II DM
Total patients.	159	35	6
On Metformin.	4.	14.	4
Without Metformin.	155.	21.	2

Discussion:

The data shows:

- 200 pregnant women with PCOS pregnant women.
- 21 pregnant were on metformin, 19 of them were term delivered and one had premature delivery .

179 pregnant were not on metformin during pregnancy, 8 had preterm delivery, 5% of the women not on metformin had preterm delivery.
The majority of Pregnant with PCOS 18/21 (85.7%) on Metformin had GDM or pre-existing DM.

Conclusion:

- Almost 10% of these women (21/200) ended up being treated with Metformin, predominantly for sub-optimal glycaemic control of GDM.
- Without adjusting for confounding variables, it is difficult to conclude on the impact of Metformin usage on preterm labour on this cohort of women. However, the fact that the highest risk group (GDM on Metformin) experienced similar preterm delivery rates as lower risk normoglycemic women suggests a possible influence of Metformin as reported in published research studies.