

Metformin and Fertility

WHAT IS METFORMIN?

Metformin® is a tablet taken 2-3 times a day with meals. Metformin may be beneficial for women diagnosed with Polycystic Ovary Syndrome (PCOS) who are undergoing fertility treatment. It is recommended that Metformin be commenced at least one month leading up to fertility treatment.



HOW DOES IT WORK?

Women with PCOS commonly have high androgen and insulin resistance. Administration of Metformin acts on the pancreas and possibly the ovary to increase the body's sensitivity to insulin and reduce the androgen levels. Correction of these hormone levels, may enable ovulation to occur.

METFORMIN USE FOR PCOS

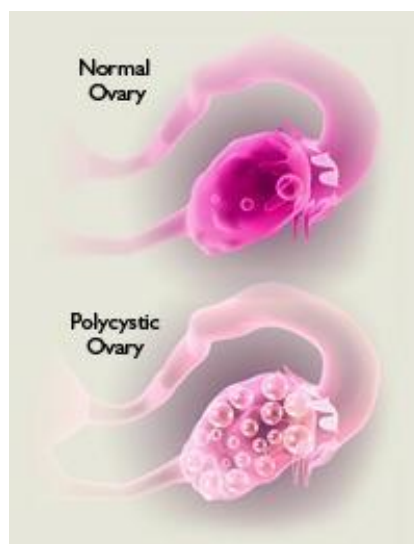
Metformin regulates blood sugar levels in diabetics but has been shown to be beneficial to women with PCOS for:

- Ovulation induction in combination with Clomiphene or Letrozole
- IVF/ICSI

HOW EFFECTIVE IS IT?

Use of Metformin during Ovulation induction with Clomiphene has been shown to increase clinical pregnancy rates.

When used in IVF, Metformin may also decrease the chances of getting OHSS (ovarian hyperstimulation syndrome)



IS IT SAFE?

- The current evidence supports Metformin is safe during pregnancy
- Studies have also shown no detrimental effects in babies resulting from the use of Metformin fertility treatments
- Metformin in a recent study did decrease the rate of late miscarriage and preterm birth. However, further research is required in this area
- Metformin should NOT be used in women with kidney or liver problems, which must be assessed before commencing the drug

SIDE EFFECTS

Metformin's most common side effect is gastrointestinal upset. This includes diarrhoea, nausea and vomiting. Hence your pharmacist or doctor will recommend a gradual increasing dose over time.

References

1. Metformin treatment before and during IVF and ICSI in women with PCOS summary of a Cochrane Review Fertility & Sterility 104/3 p542 2015 Costello MF
2. Metformin use in women with PCOS Ann Transl Med 2014 2/5 p56 Johnson N

Ask your Repromed doctor if Metformin is recommended for you.