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A Comparison of Fertility Surgery and Fertility Medication

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A Comparison of Fertility Surgery and Fertility Medication

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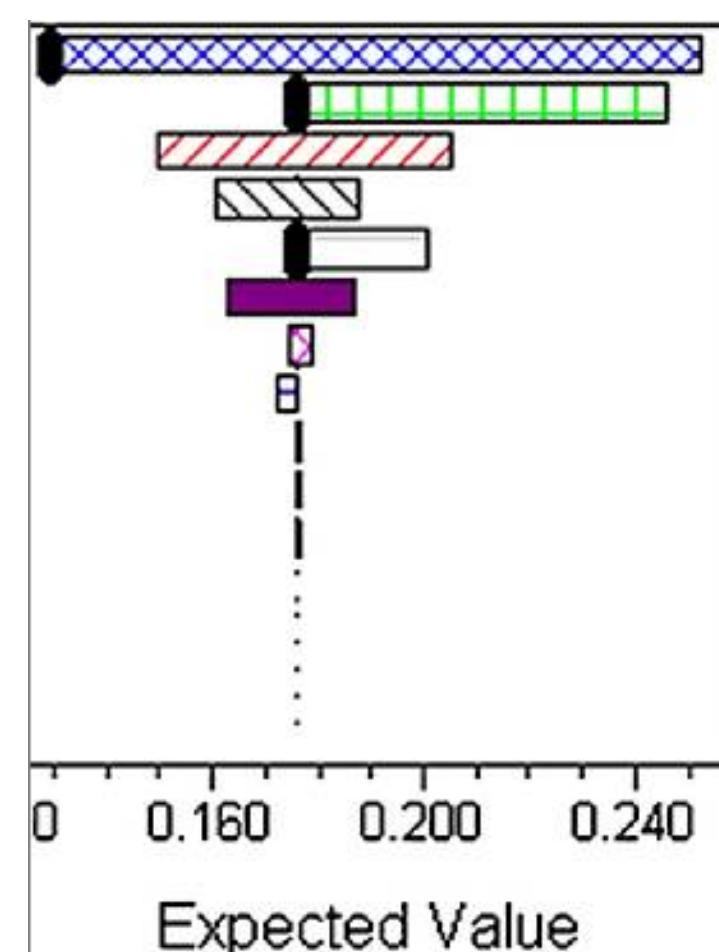
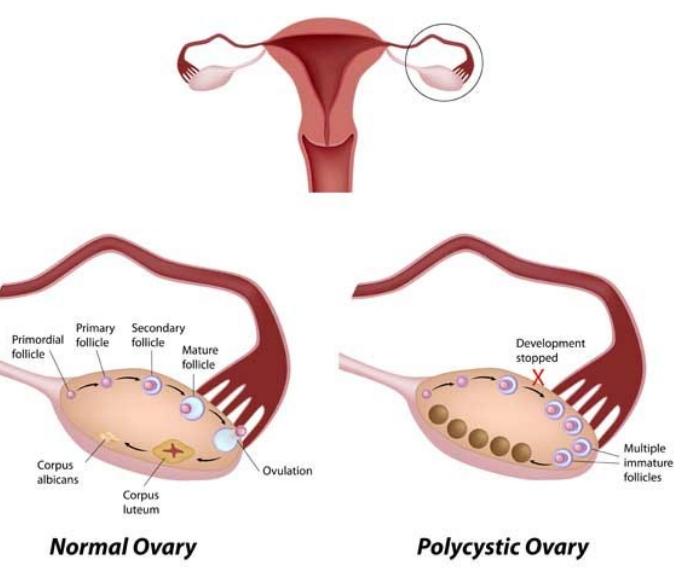


Background

- P.C.O.S.= Polycystic Ovarian Syndrome
- 7% of women are diagnosed between the age of 15-44
- PCOS regulates menstrual cycles and elevates androgen levels
- Most women find out they have PCOS in their 20's or child-bearing years
- The risk of having PCOS is equal throughout races and ethnicities.

Specific Aim

- This study will look at how removing ovarian cysts improve the fertility in women with PCOS.
- This study will also compare removing ovarian cysts and looking at the medication females receive for fertility.



Expected Results

- Almost half of the mice that went through fertility surgery will become pregnant
- Obese mice will have a harder time getting pregnant even with infertility treatment
- Mice who have taken Metformin will see an increase in pregnancy
- Metformin shows effectiveness when achieving ovulation in mice
- Metformin also reduces the insulin concentration in mice

Figure 1. Tornado Diagram of the analysis of ovarian ovulation between the different medication's women with PCOS would have taken.

Conclusion

- Statistics show that fertility medication works well compared to fertility surgery (Figure 1)
- With lifestyle changes (eating habits) PCOS should not be a reason for a women to not get pregnant.
- Metformin shows effective results on women getting pregnant without surgery
- Mice have proven that the use of metformin works along side with fertility surgery

Future Direction

- Ovarian Tissue freezing would help with infertility for women who are in their late 30's and early 40's.
- Genetic screening will help women have a better chance of having children
- “Three parent” embryos will become more popular because it will help reduce disease

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