Outcome of Laparoscopic Ovarian Drilling (LOD) for Women with Polycystic Ovary Syndrome.

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Abstract

Objective: To evaluate the effectivity of laparoscopic ovarian drilling procedures at the East Sussex Healthcare Trust, UK, over the past decade on sub-fertile women with polycystic ovary syndrome, regardless of clomiphene resistance. Design: Retrospective case note review of LOD procedures Methods: *Study 1: Evaluating a systematic literature review investigating ovulation and pregnancy rates following LOD. *Study 2: An audit of 58 women with LOD treated for ovulation induction at the ESHT fertility clinic between 2005-2014. Main outcome measures: Ovulation, pregnancy, live birth, miscarriage rates; tubal patency; associated pathologies; previous treatments compared with Cochrane Review 2012. Results: *Study 1: From the literature review, 71% achieved ovulation, whereas the pregnancy, live birth and miscarriage rates were 25-51%, 24-44% and 4-9% respectively. *Study 2: Of the 58 patients studied, ovulation rate was 69%, pregnancy rate was 39.4% and live birth rate was 30.3%. The miscarriage rate was 15.4%. Pregnancy outcome after LOD, irrespective of further treatment, showed 34 pregnancies. Including 17 spontaneous pregnancies and 17 pregnancies after further treatment. Of the 34 pregnancies, 85.3% were live birth, 11.7% miscarriages and 1 ectopic pregnancy. Conclusion: No significant difference in ovulation rates post-LOD in ESHT, which is comparable to published studies. The low pregnancy and live birth rates indicate that additional factors affect the success of LOD. Co-existing pathology is associated with lower pregnancy rate post-LOD. Novel theories are postulated to explain underlying pathologies, thus PCOS treatment may change and open a fascinating area of research. Keywords: polycystic ovary syndrome, laparoscopic ovarian drilling, clomiphene citrate

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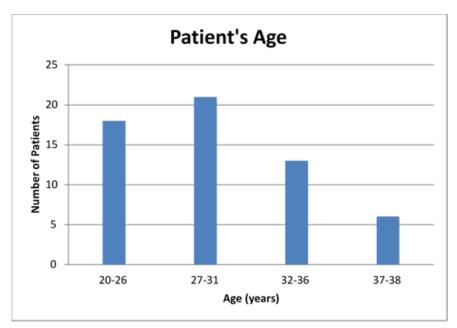


Figure 1 shows the age of the patient when having LOD.

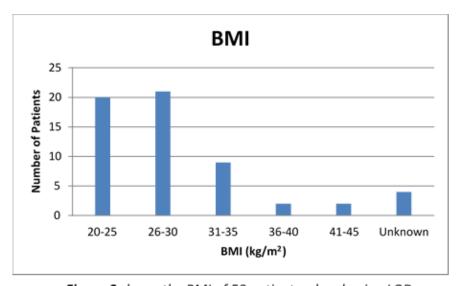


Figure 2 shows the BMI of 58 patients when having LOD.

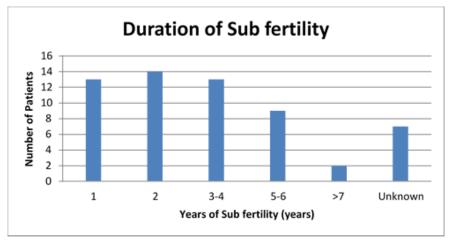


Figure 3 shows the duration of subfertility before LOD.

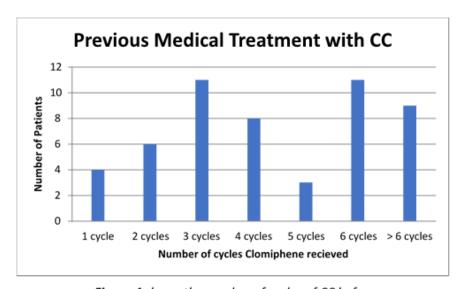


Figure 4 shows the number of cycles of CC before

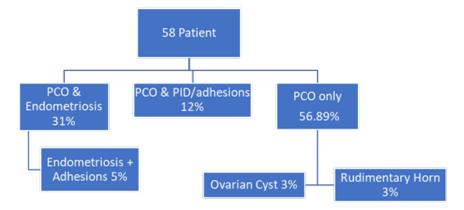


Figure 5 shows operative findings in LOD

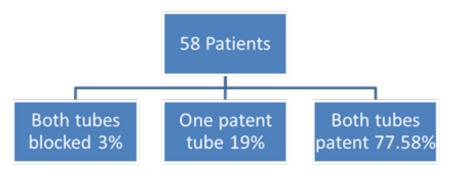


Figure 6 shows tubal patency done at LOD.

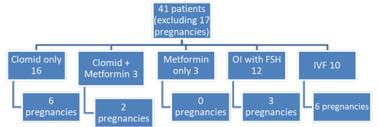


Figure 7 shows the different treatments underwent by the 41 patients who did not conceive after LOD.



Figure 8 shows the outcome of spontaneous pregnancies in pure PCOS patients.

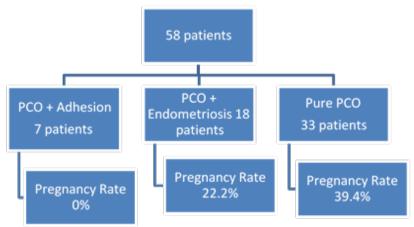


Figure 9 shows the rate of spontaneous pregnancies in correlation to the associated pathologies.