Endometrial Tuberculosis a Treatable Cause of Infertility
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ABSTRACT
We present a case of 29 years lady with secondary infertility and amenorrhea. Her clinical findings were normal. Her hormone assays and ultrasonography was normal. She underwent hysteroscopy which showed atrophic endometrium and PCR for mycobacterium tuberculosis was sent which was reported positive for Mycobacterium tuberculosis. She was diagnosed as a case of Endometrial tuberculosis. Anti tuberculosis therapy was started for six months. After the completion of medical therapy she spontaneously conceived and delivered a healthy full term baby. Tuberculosis is a major public health problem among developing country like Nepal.

KEY WORDS
Conceived, Endometrial tuberculosis, Genital tuberculosis, Hysteroscopy, Infertility

INTRODUCTION
Tuberculosis is a major public health problem among developing countries like Nepal. Genital tuberculosis (GTB) in females is well recognized as an important aetiological factor for infertility in countries with high prevalence of TB.¹ Tuberculous infection of the female genital organs can result in infertility, dyspareunia, menstrual irregularities and chronic pelvic inflammatory disease.² The worldwide incidence of GTB is approximately 5-10% in infertile women.¹ It varies from as low as 0.69% in some developed countries to as high as 9.9% in our country Nepal.³ The most common site of genital tuberculosis are fallopian tubes in 90-100% followed by endometrium in 50-90% of cases.⁴

CASE REPORT
Twentynine years lady presented with history of amenorrhea for 8 months to Gynecology Department. She had normal delivery 8 years back and had uneventful postpartum period. She breastfed her baby for 1 year. Her menstrual cycles resumed 9 months after the delivery of the baby. It was normal in flow and character. For the past eight months she had cessation of menstruation. She didn’t complaint of monthly abdominal pain. On clinical examination all findings were within normal limit. Her HIV status was negative. Her hormonal profile like Thyroid function test (TFT), FSH, LH, Prolactin were all within normal limit. Transvaginal sonography showed an endometrial thickness of 6 mm. She was given oral contraceptive pills (OCPs) for withdrawal bleeding, but she did not get her cycles despite being on OCPs. She underwent diagnostic hysteroscopy and biopsy. Hysteroscopic findings suggested atrophic endometrium suggestive of endometrial tuberculosis and was sent for PCR which was positive for Mycobacterium tuberculosis. She was started on anti tubercular therapy (ATT) CAT I (HRZE 2 months + HR for 6 month ). After the completion of treatment she had resumption of menstrual cycle. After 6 normal menstrual cycle she became pregnant and delivered a health newborn at term.
DISCUSSION

Genital tuberculosis (GTB) is one of the major causes for severe tubal disease leading to infertility. The worldwide incidence of GTB is approximately 5-10% in infertile women. It varies from as low as 0.69% in some developed countries to as high as 19% in developing countries. The most common site of genital tuberculosis are fallopian tubes in 90-100% followed by endometrium in 50-60% of cases. Unlike pulmonary tuberculosis which present with specific symptoms, women with endometrial tuberculosis often present with non-specific symptoms and most of them are asymptomatic hence diagnosis and treatment are delayed. Patient can present with symptoms like infertility and menstrual irregularities like amenorrhea, oligomenorrhea, hypomenorrhea, menorrhagia, dysmenorrhea, metrorrhagia, pelvic pain and abnormal vaginal discharge. Though the diagnosis of genital tuberculosis is largely dependent on high degree of suspicion. In countries where prevalence of tuberculosis is high, it should be one of the differential diagnosis amongst women who present with amenorrhea and secondary infertility. Fallopian tubes are affected in most cases, and rates of successful pregnancy remain low even after treatment. Standard drug treatment is for 6 months, but prolonged treatment with additional drugs is required if resistance occurs or if there is severe extrapulmonary disease. Drug resistance is a concern and culture samples should be obtained to identify drug sensitivity. Culture yield for the organism is as low as 10.6% hence, PCR is a good alternative for identification of the organism and drug-resistance genes.

Genital tuberculosis can be a cause of secondary infertility and amenorrhea amongst women. Hence this should be one of the differential diagnosis. Early diagnosis and treatment can cure the disease and help a lady have normal pregnancy and child. Preventive measures like BCG vaccination at birth, identification of people with TB, early diagnosis and treatment of tuberculosis will prevent the rate of extra pulmonary TB, which in turn will help to reduce conditions like genitourinary tuberculosis and infertility.

REFERENCES