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Case Report

Mifepristone and misoprostol in pregnancy termination in hyperthyroid patients

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ABSTRACT

Incidence of clinical hyperthyroidism in pregnant patients has been reported as 0.25-2.8%. They may be anxious and may not opt for surgical methods of medical termination. Medical termination of pregnancy by Mifepristone and Misoprostol is increasingly being used. We do not know the efficacy of this method in hyperthyroidism.

Keywords: Mifepristone, Misoprostol, Hyperthyroidism

INTRODUCTION

We know that pregnancy with hyperthyroidism is associated with many adverse effects like preeclampsia, heart failure, preterm delivery, growth restriction.[4] Little is known about pregnancy termination in hyperthyroid patients, using, mifepristone and misoprostol. Here we report 2 cases of hyperthyroidism undergoing pregnancy termination with these two agents.

CASE REPORT

Case 1

35 years old P2002 with 2 previous LSCS with 6 weeks of pregnancy came for medical termination of pregnancy. On examination, there was no examphalos, no pallor or icterus. Thyroid was not enlarged. Her pulse rate was 104/mt regular, BP was 150/100. CVS examination did not reveal any abnormal heart sounds. On haematological examination haemoglobin was 10.9 gm%, blood group was B+. Her haemoglobin was 10.8 gm%. Her RFT was done as she was hypertensive. Urea was 32; creatinine was 1mg/dl. She ultrasound was done which revealed intrauterine pregnancy of 6weeks with yolk sac .She was anxiousand did not want surgery for pregnancy termination. She opted for medical method of pregnancy termination with mifepristone and misoprostol. She was given 200 mg of mifepristone and after 48 hour 800 microgram of misoprostol was inserted vaginally. She did not have any vaginal bleeding. Since she was very apprehensive and adamant on not having any surgical procedure, we tried again with 600 mg of mifepristone and 48 hours later 800 microgram misoprostol vaginally. There was no vaginal bleeding. She was advised thyroid function test. Her TSH was 0.04, T_3, T_4 were increased. She was put on neomarcazole 5 mg tds. Her TFT was repeated after 2 weeks and her TSH was 0.1. Her dose was increased to 40 mg/day. After 1 week her TSH was 0.76 and free T4 was normal. By this time her pregnancy was 11 weeks. She was given 600 mg of mifepristone and 800 microgram of misoprostol virginally. She had vaginal bleeding and completeness of M.T.P was proven after 1 week by ultrasound.

Case 2

36 years p4004 came to out-patient department with pregnancy of 6 weeks 4 days. She wanted pregnancy termination. On taking history, she revealed that her thyroid was enlarged for last 2 years. She was advised neomarcazole 30 mg per day, which she had been taking

irregularly. She was anxious, pulse rate was 110/mt, BP was 130/90. She had exampthalos. Her thyroid was enlarged irregularly. She underwent an ultrasound examination, which revealed intrauterine pregnancy of 5 weeks with yolk sac. Her TSH was 0.2, free T_4 was increased. She opted for medical method. She was given 600 mg of mifepristone orally after 72 hours 800 microgram Misoprostol was inserted vaginally. She had mild vaginal bleeding. After 1 week her ultrasound revealed 7 weeks pregnancy with FCA +. Since she was insistent for not undergoing surgical method. We increased the dose of neomarcazole to 40 mg per day and advised her to be regular in this treatment. She was called after 10 days. Her TFT was done and TSH was 0.48 Free T_4 was in normal range. She was again given 600 mg of mifepristone and 48 later vaginal 800 microgram of misoprostol. She was called after 1 week. She revealed that she had good amount of vaginal bleeding and ultrasound revealed absence of foetus.

DISCUSSION

Hyperthyroid patients do become pregnant. Incidence of hyperthyroidism in infertile patients is 4.2%.[5] Symptomatic hyperthyroidism complicates 1 in 1000 to 2000 pregnancies[1] to 2.8%[2] of Pregnancies. Because normal pregnancy stimulates similar clinical findings to similar to thyroxin excess, mild thyrotoxicosis may be difficult to diagnose. Suggestive finding include tachycardia that exceeds that usually seen in normal pregnancy, thyromegaly, exophthalmos and failure to gain weight despite adequate food intake.[4] Tachycardia was seen in both of our patients. One patient had exophthlos. Laboratory diagnosis is by depressed TSH and elevated serum free T_4.[4] These findings were seen in both of our patients. There is high prevalence of anxiety and mood disorder in women with hyperthyroidism.[3] Both of our cases were anxious and very reluctant to undergo surgical evacuation, in spite of failure of initial medical method of termination.

There is no literature available regarding efficacy of pregnancy termination in these patients with mifepristone and misoprostol. In a euthyroid patients, the regimens consisting of mifepristone and misoprostol in home based medical abortion is safe and effective.[5] Clinical trials in United States, Canada and Turkey report complete abortion rate from 91%-100%.[6-9] Hyperthyroidism in pregnancy is associated with low birth weight, intrauterine growth retardation, still birth, thyroid storm and maternal congestive heart failure. During early pregnancy symptoms of hyperthyroidism may worsen as HCG also has TSH like action.[4]

In general population the failure rate of mifepristone misoprostol is 0 to 9%.[6-9] We were not able to induce medical abortion in both cases of uncontrolled hyperthyroidism. More ever as soon as the hyperthyroidism is under control both of these cases were successful in having medical abortion with Mifepristone and misoprostol. In patients who are not successful in having medical abortion with above regime, it may be advisable to get thyroid function tests.

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