

**CROHN'S DISEASE AND PREGNANCY- A RARE COEXISTENCE****Dr. Sonal Bhuyar\***

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**INTRODUCTION**

Inflammatory Bowel Disease (IBD) is the name for conditions that cause inflammation and ulceration of the digestive tract, including Crohn's disease (CD) and Ulcerative colitis (UC). The incidence of CD in Asia is approximately 0.5 cases per 1, 00,000 persons<sup>1</sup>, which is much lower than that in the west. But the gap is bridging over the last two decades, probably due to the westernization of life styles and environmental factors. The coexistence of CD with pregnancy is rare. This disease affects women during their child- bearing years, with the peak age of onset between 15-30 years<sup>2</sup>. It has a slight female predisposition with female- to male ratio being 1.2:1<sup>[1]</sup> The severity and extent of the disease at the time of conception appears to influence the course of disease during pregnancy. They have a higher rate of

adverse outcomes and should be followed as high risk pregnancy with close monitoring and counseling. In this case, the importance of preconceptional control of disease and continuation of medical treatment in a patient of CD with pregnancy to optimize her clinical course and neonatal outcome is highlighted.

**KEYWORDS:** Crohn's disease, pregnancy, successful outcome.

**CASE REPORT**

A 31 year old primigravida came to antenatal OPD for registration at 12 weeks of gestation. It was a spontaneous conception within one year of marriage. Her LMP was 21/8/14 and she was due on 28/5/15. She had no particular complaints related to pregnancy but her past history was quite remarkable. She had undergone appendicectomy in 2002 and received anti-Kochs treatment (AKT) for 8 months for terminal ileal Kochs. In March 2010, she presented with complains of pain in abdomen and bilious vomiting. Initial colonoscopy examination

showed ulceroproliferative lesions in terminal ileum. The provisional diagnosis was ileal Kochs considering her past history. The histopathological examination of biopsy was not definitive and revealed intestinal mucosa with ulcerations and non-specific inflammation with eosinophils. Her symptoms of abdominal pain and vomiting worsened even after conservative treatment for ten days. She was subjected to small bowel enema study which showed two short segment strictures in distal ileum. She underwent laparoscopic adhesiolysis with excision of strictures and end- to- side anastomosis of ileum to ascending colon. Histopathological examination report confirmed the diagnosis of Crohn's disease and she was started on tab. mesalamine & folic acid. In November 2013 she developed right sided perianal swelling with pain and purulent discharge. Perianal abscess drainage with fistulectomy was carried out. In June 2014 she had recurrent perianal abscess which was organized in anterior midline with bilateral extension for which she underwent exploration and drainage of abscess cavity.

She was in the phase of remission at the time of conception. She was advised regular antenatal visits and ultrasound was done every 8 weeks to monitor interval growth of fetus. She was also asked to consult her gastroenterologist periodically during pregnancy. Her first and second trimesters were uneventful. Mesalamine and folic acid were continued during pregnancy along with antenatal supplements which she tolerated quite well. There were few self- limiting episodes of diarrhea alternating with constipation throughout pregnancy. Her third trimester was complicated with preterm labour which was managed with tocolytics and betamethasone. But rest and tocolytics further increased her problem of constipation.

Elective cesarean section was planned at 37 weeks due to extensive scarring in perineal region and to avoid risk of fistula formation after vaginal delivery. She gave birth to a full term healthy child weighing 3.5kgs. In spite of multiple surgeries in the past, LSCS was uneventful. Fortunately she remained in the phase of remission throughout her pregnancy and puerperium which reflected in her good obstetric outcome.

## DISCUSSION

CD can affect any part of gastro- intestinal tract (GIT), but the most common are small intestine or colon or both. It is characterized by periods of flare ups and remissions. A woman with CD contemplating pregnancy should optimize her disease status and overall health before conception. About two- thirds of patients in remission at conception stay in remission throughout pregnancy<sup>[3]</sup> In most cases, CD does not affect a woman's fertility except when

she has an acute flare of disease or has undergone pelvic surgery for the disease. Infertility rates of 26-48% have been noted with previous surgery as compared to 12-15% without surgery, probable reason being pelvic scarring, adhesions and tubal infertility.<sup>[2]</sup> Voluntary infertility due to couple's anxiety regarding heritability, teratogenesis of drugs and relapse of condition during pregnancy is also common. The chance of passing CD to child by affected mother is 5% and it rises to almost 35% if partner is also affected.<sup>[4]</sup>

No significant effect of pregnancy has been noted on the progress of the disease but CD is definitely associated with adverse pregnancy outcomes such as spontaneous abortion, preterm labour, low birth weight babies and still birth. Hence good communication is required between patient, obstetrician, gastroenterologist and pediatrician for a healthy pregnancy and healthy infant. The majority of medications for CD are considered low risk during conception, pregnancy and lactation except methotrexate, and they should be continued during pregnancy. Discontinuation or change to a new drug is often a cause for disease flare. Folic acid 400 microgram should be taken with 5-aminosalicylates as they impair folic acid metabolism.

Vaginal delivery is recommended in patients of CD in remission with few exceptions. The perineal complications occur infrequently in women who deliver vaginally with an episiotomy if there is no active perineal disease at the time of delivery. Cesarean section should be the choice only if the disease affects tissues around vagina or if the woman has ileoanal pouch. But the rates of cesarean section as high as 44% have been noted in patients of CD with the main concerns for vaginal delivery being anal sphincter or perineal damage leading to development or worsening of perianal disease.<sup>[2]</sup> Postpartum flares are common in autoimmune diseases, but if a patient is stable on medical treatment, flares are rarely seen in CD after delivery. Breast feeding is highly recommended in these patients. In this case, barring preterm labour, complications such as infertility, abortions or low birth weight baby were not encountered, again emphasizing the importance of good control of the disease.

## CONCLUSION

Majority of women with CD in remission have similar fertility rates to the general population and most of them have a successful pregnancy outcome. Hence they should not be discouraged from child bearing; rather they should conceive while the disease is quiescent with minimum medication required. Most of the medications are safe during pregnancy and lactation. Discontinuation or change of drug should be avoided as far as possible. Given the

limited data and possible adverse pregnancy outcomes, pregnant woman with CD requires an interdisciplinary approach to therapy so as to have a good maternal and neonatal outcome as seen in this case.

#### DECLARATIONS

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