International Journal of Surgical Research 2014, 3(2): 19-21
DOI: 10.5923/j.surgery.20140302.01

Successful Pregnancy and Delivery in a Young Woman with Permanent Colostomy Due to Rectal Carcinoma: A Case Report

Osman Habeeb MD[1,*], Abdalla Ali MD Frcog[2], Fath Elrahman Mohemmed MD[3]

[1]Assisstant Professor of Surgery, University of Kassala, Faculty of Medicine and Health Sciences
[2]Professor of Obs & Gynae, Dean Faculty of Medicine, University of Kassala
[3]Consultant of Surgery, Kassala Hospital

Abstract Permanent colostomy in a young female patient has a great psycosocial impact; including marital and sexual life. Pregnancy in a women with ostomy possess significant concern in it is management; however the literature addressing this problem revealed minimal information. We reported a 31 years old female with bleeding per-rectum and low rectal mass 3.5 cm from the anal verge. The mass proved to be an adenocarcinoma by biopsy and histopathology and it is stage II by Dukes classification. Abdomino-perineal resection with sigmoid permanent colostomy were performed. Six months after surgery and during routine ultrasound follow-up the patient discovered to be pregnant. She delivered spontaneously via vaginal rote at term with no reported complication. Usually an ostomy is carried out for benign diseases in young women and it is uncommon to see osomaters who become pregnant. Our patient is well adapted to her social and sexual relationship and intimacy in a short period.

Keywords Pregnancy with colostomy

1. Introduction

Permanent colostomy in a young female patient has a great psychosocial impact on her marital and sexual life. Furthermore, pregnancy in a woman with ostomy is always a matter of great concern in terms of management [1-3]. Living with a colostomy may seem like a big undertaking. It is similar to other major changes in life [4]. Therefore, having a colostomy will not affect the ability of a woman to become pregnant; unlike ileostomists who will runs a greater risk of her stoma blocking up due to pressure exerted in the intestine. Despite the seriousness of the issues involved therein, the literature addressing this problem reveals minimal information [1, 2].

2. Case Report

A 31-year old female presented with bleeding per rectum and low rectal mass 3.5 cm from the anal verge. Double contrast barium enema; colonoscopy and C.T scan followed by biopsy and histopathology showed that the mass was an adenocarcinoma at stage II by Duke's classification. C.T scan of the abdomen revealed no liver metastasis or lymph node enlargement. Hematological and biochemical investigations showed anemia of iron deficiency type (Hb level 9,1x 10^9/L) and the platelet count was 212 x 10^9/L. Urea and electrolytes were normal. Carcinoemberyonic antigen (CEA) level was 8.7ng/ml. The patient underwent abdomino-perineal resection with sigmoid permanent colostomy.

Six months after surgery routine ultrasound follow-up showed that the patient was pregnant. Since she was not started chemo-radiotherapy, the pregnancy was allowed to complete the full term. (Figure 1). The stoma diameter during pregnancy was slightly increased at 32 weeks gestation. She delivered spontaneously *via* vaginal route upon completion of the term with no reported complication (Figure 2).

Usually an ostomy is carried out for benign diseases in young women and it is uncommon to see osomaters who become pregnant [1-3]. Pregnancy following permanent colostomy due to colorectal cancer is very rare [3] Maunsell and Der Bruke were reported 2 cases of rectal carcinoma and pregnancy but without colostomy [5, 9]. Similarly, Gopal and colleagues have reported that only 3.44% of the pregnant lady had an ostomy due to malignancy and about 79% were secondary to inflammatory bowel diseases as the primary cause [1]. In a pregnant woman, as the fetus grows in the

* Corresponding author:
osmanha7733@yahoo.com (Osman Habeeb MD)
Published online at http://journal.sapub.org/surgery

uterus and the woman begins to gain weight, the stoma may begin to protrude, the diameter may increase, and the skin around the stoma may start to flatten out. Furthermore, in a patient with ileostomy, nausea and vomiting associated with morning sickness may be problematic. Fluid and electrolyte imbalances can occur rapidly under these conditions, causing dehydration.

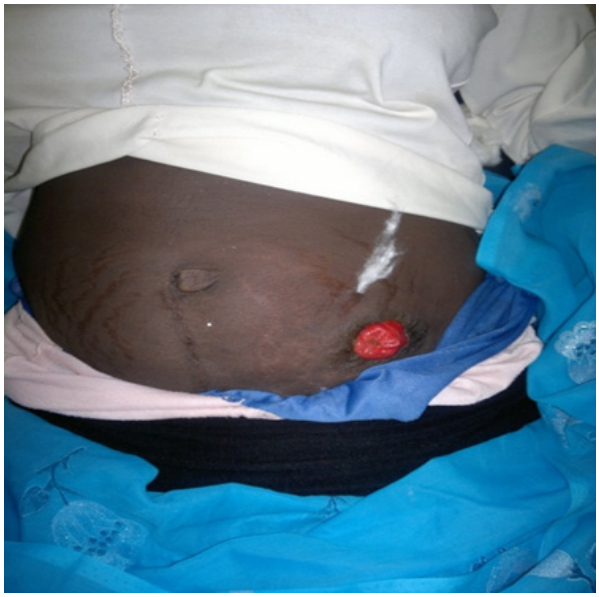

Figure (1). Shows the end sigmoid colostomy in a pregnant 30 weeks patient

Figure (2). Shows the patient after successful delivery

Our patient had 3 children before ostomy and one afterwards; she felt no major differences in her pregnancy period before and after the colostomy except having a feeling of dragging sensation in the area of the colostomy. She also used laxative twice for constipation in the second and last trimester of pregnancy and maintained herself on higher fiber uptake besides hot milk to avoid constipation.

Beena *et al.,* have reported a primigravida patient with stoma that developed fecal impaction leading to unengaged labor and labor dystocia. However, a loaded rectum was never suspected in the antenatal period due to her colostomy [8]. Similarly, van Horn et al., have reported stoma related problems in 68% of their patients during second and third trimester however, these problems were corrected without medical intervention. These data substantiate that the presence of colostomy should not be a deterrent for successful pregnancy and delivery [6]. Nevertheless, potential complications such as intestinal obstruction, stoma prolapse, narrowing of the stoma and bleeding still remain as some of the reported complication in pregnant women with osotmy [2, 7].

Our patient was afraid to undergo caesarian section and opted for the normal vaginal process which was successfully achieved without any major complications. An epistomy of 2 cm length was done to facilitate the process. Pliego recommended that the delivery of stomated patients should be *via* vaginal route and the caesarian section reversed for obstetric indications [2].

Our patient is well adapted to her social and sexual relationship and intimacy in a short period. Given that sexual function is usually not impaired in ostomaters, while potency of men may sometimes be affected [4]. 49.9% of the ostemators who become pregnant after ostomy had been pregnant before; and 56% get pregnant for the first time after ostomy [1].

Pregnancy and delivery in patients with colostomy is safe and should be encouraged. However, the partners may need counseling regarding sexual and social relationship.

REFERENCES

[1] Gopal KA, Amshel AL, Shonberg IL, Levinson BA, Van Wert M, Van Wert J. ostomy and pregnancy. Dis Colon Rectum 1985 Dec; 28(12):912-6 (PubMed).

[2] Pliego AR, Gracia JD, Neri-Ruz ES. Stomas in pregnancy, clinical case and review of the literature. Ginecol Obestet Mex. 2001 Nov; 69:449-52(PubMed).

[3] Takahashi K, Funayama Y, Fukushima K, Shibata C, Ogawa H, Kumagi E Sasaki I. pregnancy and delivery in patiens with enterostomy due to anorectal complications from Chron`s dise disease. Int J Colorectal Dis. 2007 Mar; 22(3):313-8. Epub 2006 May 20 (pubMed).

[4] Clark J, et al: Colostomy guide. United Ostomy Association, Inc 1962-2005 (intern).

[5] Edward G, Fenimore ED. Perforated carcinoma of the ceacum in pregnancy, review of the literature with a case report. Obstetrics and gynecology. 1954 Mar; 3(3) 263-7

[6] Van Horn, et al. Pregnancy, Delivery, and Postpartum Experiences of Fifty-Four women with Ostomies. Journal of wound, ostomy and continence nursing. 1997.

[7] Lord SA, Boswel WC, Hungerpiller JC. Sigmoid volvulus in pregnancy. The American Sergoen.1996 May;62(5):380-2.

[8] Beena. A, Rajesh.U, Guer. K, Bonduflle. M. Labour dystocia due to faecal impaction after colostomy for faecaloma. J Obstetric Gynecology2010Feb; 30(2): 201-2.

[9] Maunsell. R, Charles B. Two cases of carcinoma of rhe rectum complicated pregnancy and treated by excision. Irish journal of medical scince.1925;30(5):1-6.