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Management of Pregnancy in a Patient with History of Sigmoid colostomy and Anal Sphincteroplasty: A Case Report

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Abstract | **Case Report**

Anorectal malformations (ARM) are congenital anomalies that affect the development of the anus and rectum, and they can lead to significant medical and surgical challenges throughout a person's life. For women with ARM, pregnancy can present with additional complications. In this article, we present a case report of a pregnant patient with history of ARM who has undergone sigmoid colostomy and anal sphincter reconstruction. Through this case study, we aim to provide insight into the unique challenges faced by pregnant patients with colostomy and anal sphincteroplasty, their impact on pregnancy and labor, as well as the importance of close monitoring and collaboration between obstetric and surgical.

Keywords: Anorectal malformation; high risk pregnancy; sigmoid colostomy; PSARP.

CASE REPORT

Patient XYZ, a 22-year-old primigravida with a history of anorectal malformation, sigmoid colostomy and anal sphincter reconstruction was admitted to the hospital at 37 weeks of gestation for labour pain.

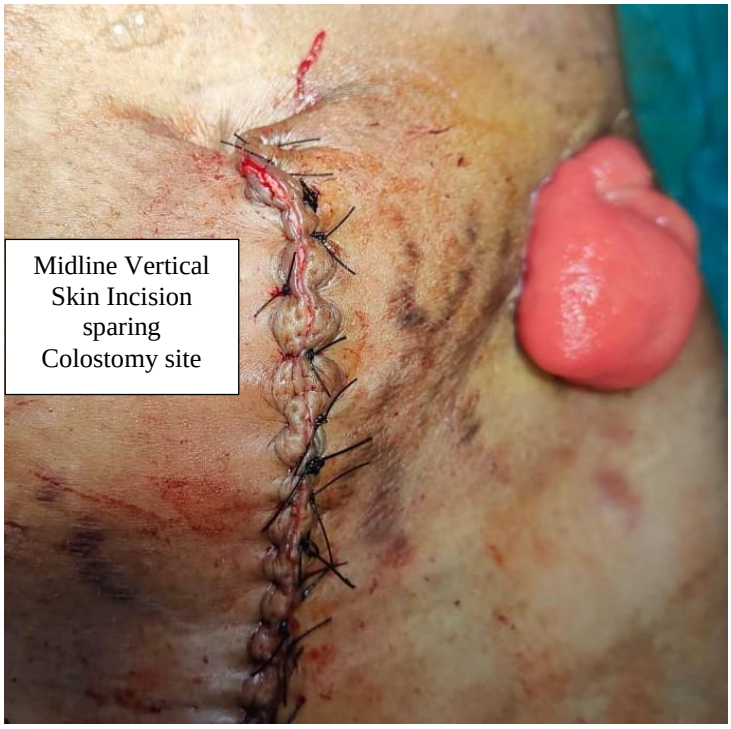
Patient was diagnosed with anorectal malformations at birth due to the absence of passage of meconium and abdominal distention. An invertogram revealed an intermediate anorectal malformation. A high sigmoid colostomy was performed and the colostomy was healthy and functioning regularly. The patient was followed up regularly and subsequent distal colonogram, colonoscopy, and CT scans revealed no evidence of leaks or fistulas. At 5 years of age, a Posterior Sagittal Anorectoplasty (PSARP) with neo-anus creation and perineal body reconstruction was performed.

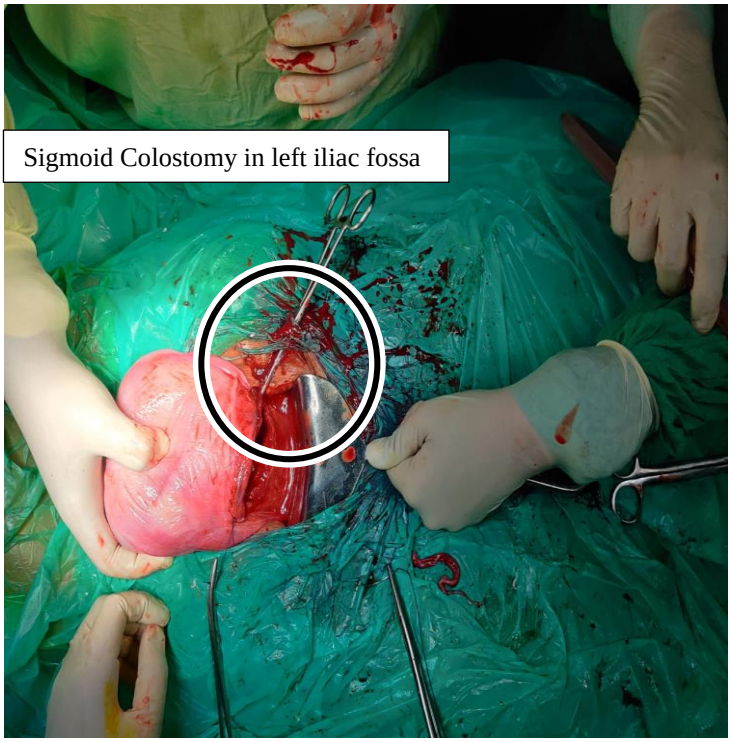
At 20 years of age, an anal sphincter reconstruction with gracilis muscle was done due to decreased resting anal tone of 39.8 mm of Hg and poor squeeze pressure of 77.8 mm of Hg as suggested by anorectal manometry, due to which the patient might have developed faecal incontinence. A rectal biopsy revealed diversion colitis and a CT colonogram showed a narrowed calibre of the distal colon loop including the sigmoid colon and rectum.

Patient was diagnosed with pregnancy 2 years later when she had 3 antenatal visits at our centre and stoma care, diet and Kegel's exercise were advised by the stoma therapist.

On admission, her general condition was fair with stable vital parameters. On per abdomen examination fundal height was corresponding with term gestation and breech presentation with regular fetal heart rate. Mild uterine activity was present. She had a stoma bag in situ in left iliac fossa. On pelvic examination, the cervix was 1.5 cm dilated with complete breech presentation.

Decision of emergency lower segment Caesarean section (LSCS) was taken after discussion with surgeon on call in view of patient with history of anorectal reconstruction with breech presentation in labour. A vertical midline incision was given and the intraoperative course was uneventful, with no bowel or bladder adhesions. A male child weighing 2.6 kg was delivered by breech extraction. The abdominal walls were closed in layers and the postoperative course was uneventful.





DISCUSSION

In summary, the above mentioned case highlights the unique challenges and considerations that must be taken into account when caring for a pregnant woman with a history of anorectal malformation and a colostomy. The prevalence of anorectal malformations among females is 15/100 000 live births and such patients may require reconstructive surgery, such as Posterior Sagittal Anorectal Plasty (PSARP) which has

long term outcomes of faecal incontinence reported in 40-67% and lack of voluntary bowel control in 15-30% [1].

During pregnancy, these patients may suffer from pelvic pain, incontinence and difficulty with bowel movements. The patient should also be advised to maintain a healthy diet and exercise regularly to help maintain muscle strength and tone. In addition, the patient should be advised to avoid heavy lifting, straining, or constipation during pregnancy as these activities can put added stress on the reconstructed sphincter muscle.

Pregnant women with colostomies may experience issues such as stoma prolapse, narrowing of the stoma, and bleeding, and it is important that they are closely monitored and provided with appropriate stoma care and support to ensure a safe pregnancy and delivery.

Literature suggests that a caesarean section is preferable in patients with anorectal malformations due to extensive correction of the perineal body, but there is no formal recommendation available [2]. Vaginal deliveries have also been reported [3].

Performing a caesarean may be difficult due to the presence of extensive adhesions intraoperatively. A vertical midline incision was chosen in our case to avoid involvement of the stoma site and the potential risk of wound infection due to its proximity to the stoma.

Furthermore, the scars after the PSARP reconstruction may not be obvious or thoroughly understood by those who are not familiar with anorectal malformations [4].

The outcome of such cases can be improved by providing comprehensive and clear information to the patient about the diagnosis, treatment options, and long-term outcomes; multidisciplinary approach involving surgeons, obstetricians, and stoma nurses; regular pre-conceptional and antenatal follow-up to identify and address any symptoms or complications that may arise and provide patients with the opportunity to discuss any concerns they may have.

Further research is needed to study the outcomes of pregnancies in patients with anorectal malformations and to determine the best management strategy for these cases because currently there is a lack of information and data on this specific population. There is a need to understand the unique challenges and considerations that must be taken into account when caring for pregnant women with anorectal malformations and colostomies.

Additionally, as the surgical techniques and treatments for anorectal malformations are constantly evolving, there is a need for ongoing research to determine the most effective and safe methods of treatment.

CONCLUSION

It is important for healthcare providers to be aware of the unique challenges and surgical considerations when caring for patients with anal sphincteroplasty and colostomy for anorectal malformation and to provide comprehensive and clear information, regular follow-up and support to ensure safe pregnancy and delivery.

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REFERENCES

1. Stenström, P., Kockum, C. C., Benér, D. K., Ivarsson, C., & Arnbjörnsson, E. (2013). Adolescents with anorectal malformation: physical outcome, sexual health, and quality of life. *International journal of adolescent medicine and health*, pp. 1-11.
2. Vilanova-Sanchez, A., McCracken, K., Halleran, D. R., Wood, R. J., Reck-Burneo, C. A., Levitt, M. A., & Hewitt, G. (2019). Obstetrical outcomes in adult patients born with complex anorectal malformations and cloacal anomalies: a literature review. *Journal of pediatric and adolescent gynecology*, *32*(1), 7-14. Available from: https://doi.org/10.1016/j.jpag.2018.10.002
3. Kim, H. Y., Kim, E., Kang, M., Park, C. W., Park, J. S., & Jun, J. K. (2012). A case of successful vaginal delivery in a patient with a repair of an imperforate anus. *Korean Journal of Obstetrics & Gynecology*, *55*(12), 963-965.
4. Stenström, P., Hambraeus, M., Arnbjörnsson, E., & Örnö, A. K. (2015). Pelvic floor in females with anorectal malformations–findings on perineal ultrasonography and aspects of delivery mode. *Journal of Pediatric Surgery*, *50*(4), 622-629.