IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 19, Issue 11 Ser.12 (November. 2020), PP 13-18
www.iosrjournals.org

Anal fissures and Haemorrhoids during pregnancy and after childbirth

Dr. Sonia Akter[1], Dr. Deb Prosad Paul[2], Dr. Md. Mahfuzul Momen[3], Dr. Karina Rahman[4]

[1]*Assistant Professor, Department of surgery, Enam Medical College Hospital, Savar, Dhaka, Bangladesh*
[2] *Professor, Department of surgery, Enam Medical College Hospital, Savar, Dhaka, Bangladesh*
[3]*Assistant Professor, Department of surgery, Uttara Woman's Medical College Hospital, Uttera, Dhaka, Bangladesh*
[4] *Assistant Professor, Department of surgery, Enam Medical College Hospital, Savar, Dhaka, Bangladesh*
Corresponding author:*Dr. Sonia Akter.*

Abstract
Introduction: *An anal fissure is a small, oval shaped tear in skin that lines the opening of the anus. Fissures typically cause severe pain and bleeding with bowel movements. Fissures are quite common in the general population, but are often confused with other causes of pain and bleeding, such as hemorrhoids. Doctors usually perform a procedure called lateralinternal sphincterotomy (LIS), which involves cutting a small portion of the anal sphincter muscle to reduce spasm and pain, and promote healing. Studies have found that for chronic fissure, surgery is much more effective than any medical treatment.Hemorrhoids are common during pregnancy and even after pregnancy. About 36% or one-third of women after childbirth complains of peri-anal symptoms the aim of the study was to find out the prevalence and risk factors of haemorrhoids and fissures during pregnancy and after childbirth.It is important to note that complete healing with both medical and surgical treatments can take up to approximately 6-10 weeks. However, acute pain after surgery often disappears after a few days. Most patients will be able to return to work and resume daily activities in a few short days after the surgery.* ***Aim of the study:*** *The goal to see the presentation of anal fissures and haemorrhoid treatment.* ***Methods:*** *This prevalence of the risk factors of hemorrhoids and anal fissures during pregnancy and after childbirth study was conducted in the Department of gynecology of Enam Medical College Hospital, Savar, Dhaka, Bangladesh during the period from December 2018 to November 2019.* ***Result:*** *Among 70 patients, maximum patients of 67 (95.71%) had peri-anal pain, and then 63 (90%) patients had peri- anal discomfort. The time of the occurrence of peri-anal disease analysis, among 70 patients maximum found in ≥32th gestational week which was 28 (40%) patients. The risk factors for peri-anal disease of during and after pregnancy, we found that 55 (78.57%) patients had positive family history. Then 23 (32.86%) patients had positive birthweight of newborn, constipation in pregnancy found 61(87.14%), vaginal delivery found 56(80%), caesarean delivery 14(20.00%), multiparas 47(67.14%), personal history of peri anal disease31 (44.29%), episiotomy 24(34.29%), perianal lacerations 15(21.43%) and straining during delivery for >22minutes found 12(17.14%). By conducting a review of Surgical Outcome Haemorrhoids and anal fissures during pregnancy and after childbirth Figure III show that 38(54.0%) Lead a higher quality of life, 21(31.0%) patients was less pain and the remaining 11(17.0%) marked their lifestyle after surgery as Better mobility.* ***Conclusion:*** *In the present study 98%, of patients presenting with a chronic anal fissure were successfully cured medically, avoiding the potential risk of permanent sphincter damage associated with surgery. In only 2 patients did a combination medical treatment fall to heal the fissure and they required sphincterotomy. Hemorrhoids and anal diseases are common during the ≥32nd of pregnancy and at the time of transport. Obstruction, individual history of perianal disease, birth weight >3800 g and delayed stress of more than 26 minutes during the second stage of labour are independent risk factors. Further investigations should remain achieved to assess actions to avoid obstruction and decrease the prevalance of hemorrhoids and anal fissures throughout pregnancy.*
Key words: *Anal fissure, haemorrhoids, pregnancy.*

Date of Submission: 16-11-2020 Date of Acceptance: 02-12-2020

I. Introduction

Doctors usually perform a procedure called lateralinternal sphincterotomy (LIS), which involves cutting a small portion of the anal sphincter muscle to reduce spasm and pain, and promote healing. Studies have found that for chronic fissure, surgery is much more effective than any medical treatment.Hemorrhoids are common during pregnancy and even after pregnancy. About 36% or one-third of women after childbirth

complains of peri-anal symptoms the aim of the study was to find out the prevalence and risk factors of haemorrhoids and fissures during pregnancy and after childbirth. Hemorrhoids generally last several days and often recur. Anal fissures often cause pain during and after a bowel movement, sometimes followed by throbbing pain for several hours. They are also often associated with itching and blood on toiled tissue, in the bowl, or in the surface of the stool. Hemorrhoids, especially thromboses ones, are not only a disease but also a social problem, as more than one third of women at reproductive age suffer from this condition[1-3].So, hemorrhoids are common during pregnancy and even after pregnancy. About 36% or one-third of women after childbirth complains of peri-anal symptoms[4-6].

One study with 835 patients reported hemorrhoid prevalence during pregnancy of 86%, which was not different from the same age group[1]. The Figure I shows haemorrhoids, anal fissures and surgical procedure. All the pictures are collected from the internet. Self-analysis of perianal disease is exceptionally inaccurate, and a true finding of perianal distress in females in last trimester of gravidness or puerperal phase was assessed in some studies[4-6]. The most recent study by Abramowitz et al.[2] identified constipation and late delivery (after 39.7 weeks of pregnancy) as independent risk factors for haemorrhoids and anal fissures during the third trimester or 32nd gestational time of pregnancy and puerperium. Functional constipation is another common issue during pregnancy, with an incidence ranging between 11% and 38%.[7]There is wide spectrum of risk factors for occurrence of hemorrhoids, and becomes increasingly complex during pregnancy[8-13]. However, some risk factors such as older age, high body mass index have been described[9]. Hemorrhoid surgery involves the vascular cushions of the anus, so not surprooosingly, hemorrhoidectomy is associated with higher rates of bleeding when compared with other anorectal procedures such as procedures for anal fistula or fissure is very low. The goal of surgery is to help the anal sphincter muscle relax which reduces pain and spasms, allowing the fissure to heal. Surgical options include botulinum toxin injection into the anal sphincter of surgical division of an inner part of the anal sphincter. Our study was to find out the prevalence and risk factors of hemorrhoids and anal-fissures and other peri-anal diseases during and after childbirth. It is important to note that complete healing with both medical and surgical treatments can take up to approximately 6-10 weeks. However, acute pain after surgery often disappears after a few days. Most patients will be able to return to work and resume daily activities in a few short days after the surgery.

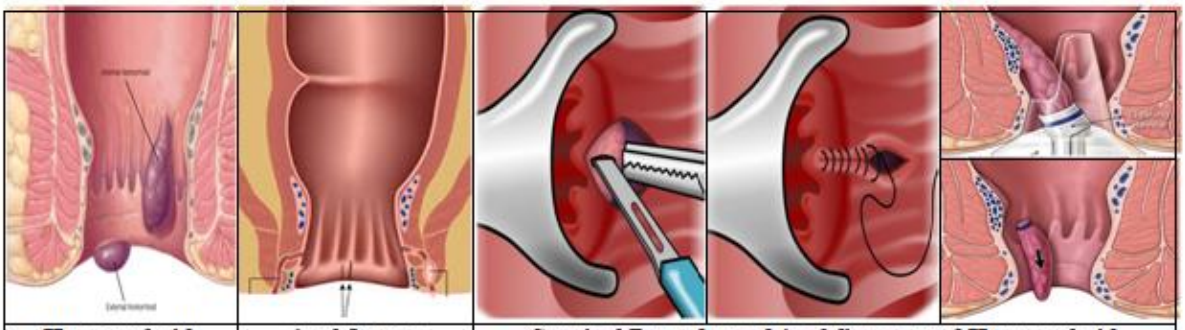

Figure I

II. Methodology & Materials

This was aprospective observational study carried out in the outdoor (OPD) department of surgery of Enam Medical College & Hospital, Savar, and Dhaka, Bangladesh during the period from July 2018 to June 2019. Our aim was to observe the importance of ANC in reducing maternal mortality. A total number of 70 cases were enrolled in this study using purposive sampling technique. Pregnant women were found for the study from 15 years of age and who consented to the study by signing the informed consent form were included in the study. During the first visit, the gynaecologist interviewed all women. Each woman completed a detailed questionnaire, including demographic (maternal age, nationality, family status), social (education, family income, place of residence, conditions of the life), anthropometric (body mass index, diet, bowel habit, family history, personal history of peri-anal diseases, previous pregnancy) factors and delivery-related questions. All women were examined four times: in the 11-14th,24th& ≥32th gestational period, on the first or second day after delivery, and 1 month after delivery. The same gynaecologist interviewed and examined the women at all four scheduled visits On the first or second day after delivery the following data were recorded: obstetric data—method of birth, length of labour, perineal trauma during labour and anthropometric information of the newborn. If any peri-anal symptoms—pain, rectal bleeding, peri-anal tissue enlargement or protrusion—or any peri-anal discomfort occurred during the study period, a colorectal surgeon investigated the woman immediately and

made a diagnosis. All the relevant collected data were compiled on a master chart first, then organized by using scientific calculator and standard statistical formula. Percentage was calculated to find out the proportion of the findings. Further statistical analysis of the results was done by computer software devised in the statistical packages for social scientist (SPSS-23) and MS excel.

III. Result

From 70 study patients we found, the maximum patients were in the age group of 25- 30 years which was 23 (32.86%), then the age group of 20-25 which was 22 (31.43%), then the age group of >30 which was 18 (25.71%), and the minimum patients were in the age group of 15-20 which was 7 (10%) [Figure-I]. From the study of BMI, we found that maximum patients were in the overweight (25-29.9) group which was 24 (34.29), then the obesity (>30) group which was 21(30%), then the normal (18.5-24.9) group which was 15 (21.43%), and minimum patients were in underweight (<18.5) group which was 10 (14.29%)[Table-I]. We found that among 70 patients, maximum patients of 67 (95.71%) had peri-anal pain, then 63 (90%) patients had peri- anal discomfort, 57 (81.43%) patients had itching, 56 (80%) patients had burning, 52 (74.29%) patients had mucous discharge, 44 (62.86%) patients had anal- bleeding, 43 (61.43%) patients had dull pain, 41 (58.57%) patients had dull pain with increase on defection, 31 (44.29%) patients had painful protrusion at the anus, 7 (10%) patients had pain only on defection, and minimum patients of 4 (5.71%) had sharp pain[Table-II]. The Figure II shows symptoms of 70 patients, maximum patients of 67 (95.71%) had peri-anal pain, then 63 (90%) patients had peri- anal discomfort, 57 (81.43%) patients had itching, 56 (80%) patients had burning, 52 (74.29%) patients had mucous discharge, 44 (62.86%) patients had anal- bleeding, 43 (61.43%) patients had dull pain, 41 (58.57%) patients had dull pain with increase on defection, 31 (44.29%) patients had painful protrusion at the anus, 7 (10%) patients had pain only on defection, and minimum patients of 4 (5.71%) had sharp pain.From the time of the occurrence of peri-anal disease analysis, among 70 patients maximum found in $\geq 32^{th}$ gestational week which was 28 (40%) patients, then 16(22.86%) patients in first to second day after delivery, then 15 (21.43%) patients in 24^{th} gestation week, then 9 (12.86%) patients in 11- 14^{th} gestational week, and minimum patients found in first month after pregnancy which was 2 (2.86%)[Table-III]. By conducting a review of Surgical Outcome Haemorrhoids and anal fissures during pregnancy and after childbirth Figure III show that 38(54.0%) Lead a higher quality of life, 21(31.0%) patients was less pain and the remaining 11(17.0%) marked their lifestyle after surgery as Better mobility.

Age group (years)	n=70	%
15 years to 20 years	7	10.00
21 years to 25 years	22	31.42
26 years to 30 years	23	32.86
> 30 years	18	25.72
Total	70	100

Table I Distribution of age group (n=70)

BMI	n=70	%
Underweight (< 18.5)	10	14.29
Normal (18.5-24.9)	19	27.14
Overweight ≥25	41	58.57
Total	70	100

Table-I: Distribute of body mass index (BMI) (n=70)

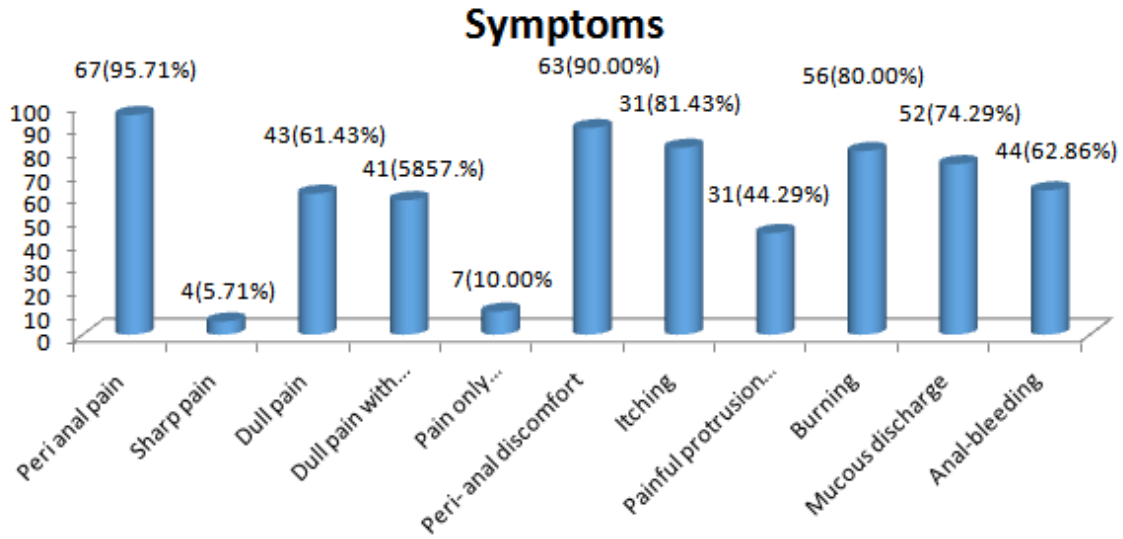

Figure II: Type of prevalence of peri anal symptoms (n=70)

Peri- anal disease	n=70	%
11-14th gestational week	9	12.86
24th gestational week	15	21.43
≥32nd gestational week	28	40.00
First to second day after delivery	16	22.86
Total	70	100.0

Table-III: Distribute the study patients according to the peri anal disease (n=70)

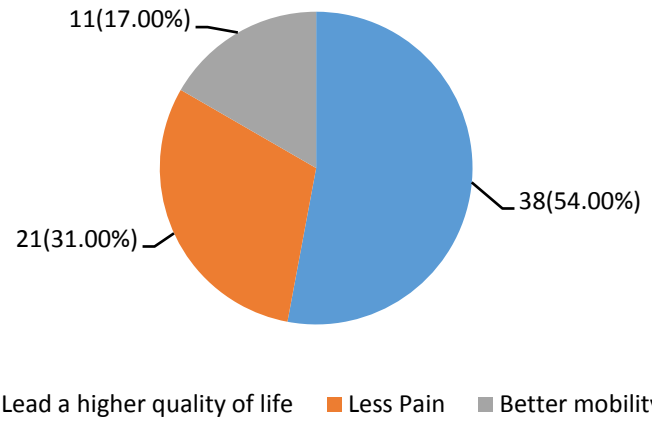

Figure III: Surgical Outcome Haemorrhoids and anal fissures during pregnancy and after childbirth (n=70)

IV. Discussion

From 70 study patients we found the maximum patients were in the age group of 25- 30 years which was 23 (32.86%), then the age group of 20-25 which was 22 (31.43%), then the age group of >30 which was 18 (25.71%), and the minimum patients were in the age group of 15-20 which was 7 (10%). Kamal et al[14], found in his study the mean age of the patients was 27.3 years (range: 19-35). Dr. Saira Bashir et al[15], found the average age of the women was 29.8 years (19-47 years).Pukus T et al[3], 280 women who agreed to participate inthe study during their pregnancy up until 1 month afterdelivery were included. Women's mean age was 28.7 years(18–45 years)[4].From the study of BMI, we found that maximum patients were in the overweight (25-29.9) group which was 24 (34.29), then the obesity (>30) group which was 21(30%), then the normal (18.5-24.9) group which was 15 (21.43%), and minimum patients were in underweight (<18.5) group which was 10 (14.29%). Pukus T et al[3]

mean body mass index was 23.1 kg/m2(15.4–43.8 kg/m2).Saira Bashir et al[15], the mean file weight was 24.3 kg/m2 (16.6-46.9 kg/m2).We found that among 70 patients, maximum patients of 67 (95.71%) had peri-anal pain, then 63 (90%) patients had peri- anal discomfort, 57 (81.43%) patients had itching, 56 (80%) patients had burning, 52 (74.29%) patients had mucous discharge, 44 (62.86%) patients had anal- bleeding, 43 (61.43%) patients had dull pain, 41 (58.57%) patients had dull pain with increase on defection, 31 (44.29%) patients had painful protrusion at the anus, 7 (10%) patients had pain only on defection, and minimum patients of 4 (5.71%) had sharp pain.Saira et al[15], found that 45.7 per cent of cases of perianal diseases of pregnancy and puerperium occurred, the most well-known problem being hemorrhoids (94.8 per cent). 64%of femalescreated perianal illnessesthrough3rdtrimester of pregnancy and 38.5 per cent after transport[16].

From the time of the occurrence of peri-anal disease analysis, among 70 patients maximum found in $\geq 32^{th}$ gestational week which was 28 (40%) patients, then 16(22.86%) patients in first to second day after delivery, then 15 (21.43%) patients in 24^{th} gestation week, then 9 (12.86%) patients in 11- 14^{th} gestational week, and minimum patients found in first month after pregnancy which was 2 (2.86%). Abramowitzet al.[2] found 9.1% incidence of peri-anal disease in thethird trimester and 35.2% incidence within 1 month ofdelivery.

From the risk factors for peri-anal disease of during and after pregnancy, we found that 55 (78.57%) patients had positive family history. Then 23 (32.86%) patients had positive birthweight of newborn, constipation in pregnancy found 61(87.14%), vaginal delivery found 56(80%), caesarean delivery 14(20.00%), multiparas 47(67.14%), personal history of peri anal disease31(44.29%), episiotomy 24(34.29%), perianal lacerations 15(21.43%) and straining during delivery for >22minutes found 12(17.14%). Pukus T et al[3],univariate analysis was performed with suspected riskfactors for the peri-anal diseases. They identifiedthat a body mass index≥25 kg/m2, positive family or personal history of peri-anal diseases, constipation duringpregnancy, multiparity, birthweight of newborn>3800g,straining during delivery for>20 minutes and perineal lacerations were significantly associated with peri-anal diseasesof pregnancy.Saira et al[15] consideration should be given to how to maintain a strategic distance from engorgement in pregnant women and thus stay away from perifascial disease. Peripheral disease has been associated with heavy labour. This compares favorably with infections occurring at the time of transport. In addition, our investigation showed that birth weight >3800 g and delayed stress throughout2ndphaseof labor of >21minutes remainfreely relatedthroughperigluteal disease of the gluteus maximus of pregnancy and puerperium[17].Femalesthroughan individual pastof pericentral gluteal infections would now keep a strategic distance from difficult labour in case they need to lessentheir dangerof hemorrhoids and gaps[15].

LIMITATIONS OF THE STUDY

Small sample size due to slightly expensive and semi invasive modality. The study was conducted in one tertiary hospital, hence may not represent the whole population.

V. Conclusion And Recommendations

Hemorrhoids and anal diseases are common during the $\geq 32^{nd}$ of pregnancy and at the time of transport. Obstruction, individual history of perianal disease, birth weight >3800 g and delayed stress of more than 26 minutes during the second stage of labour are independent risk factors. Further investigations should remain achieved to assess actions to avoid obstruction and decrease the prevalance of hemorrhoids and anal fissures throughout pregnancy.

Reference

[1]. Haas PA, Haas GP, Schmaltz S, Fox TA. The prevalence of hemorrhoids. Dis Colon Rectum. 1983; 26:435-9.
[2]. Abramowitz L, Sobhani I, Benifla JL, Vuagnat A, Darai E, Mignon M, et al. Anal fissure and thrombosed external hemorrhoids before and after delivery. Dis Colon Rectum. 2002; 45:650-5.
[3]. Poskus T, Buzinskiene D, Drasutiene G, Samalavicius NE, Barkus A, Barisauskiene A, et al. Haemorrhoids and anal fissures during pregnancy and after childbirth: a prospective cohort study. BJOG. 2014; 121:1666-71.
[4]. Harrison MJ, Hicks SA. Postpartum concerns of mothers and their sources of help. Can J Public Health 1983; 74:325–8.
[5]. Bhatia JC, Cleland J. Self-reported symptoms of gynecological morbidity and their treatment in south India. Stud Fam Plann1995; 26:203– 16.
[6]. Kukla L, Bouchalova M, Shkiriak-Nyzhnyk Z, Chyslovska N, Golding J, Goodfellow S, et al. Chronic morbidity in women, namely in pregnancy. (Comparative study between West, Central and East European centres). LikSprava 2008;1–2:43–60.
[7]. Vazquez JC. Constipation, haemorrhoids, and heartburn in pregnancy. BMJ ClinEvid. 2010; 2010:1411.
[8]. Rungsiprakarn P, Laopaiboon M, Sangkomkamhang US, Lumbiganon P, Pratt JJ. Interventions for treating constipation in pregnancy. Cochrane Database Syst Rev. 2015;9. CD011448.
[9]. Shi W, Xu X, Zhang Y, Guo S, Wang J, Wang J. Epidemiology and risk factors of functional constipation in pregnant women. PLOS ONE. 2015;10, e0133521.
[10]. Drossman DA. Functional gastrointestinal disorders: history, pathophysiology, clinical features and Rome IV. Gastroenterology. 2016, http://dx.doi.org/10.1053/j.gastro.2016.02.032 [Epub ahead ofprint].
[11]. Kubicsek T, Kazy Z, Czeizel AE. Teratogenic potential of tribenoside, a drug for the treatment of haemorrhoids and varicose veins - a population-based case-control study. ReprodToxicol. 2011; 31:464-9.

[12]. Hollingshead JR, Phillips RK. Haemorrhoids: modern diagnosis and treatment. Postgrad Med J. 2016; 92:4-8.
[13]. Medich DS, Fazio VW. Hemorrhoids, anal fissure, and carcinoma of the colon, rectum, and anus during pregnancy. SurgClin North Am. 1995; 75:77-88.
[14]. SairaBashiretal,Occurrence OfHemorrhoids And Anal Fissures Through Pregnancy And Postpartum.,Indo Am. J. P. Sci, 2020; 07(04).
[15]. Kemal Beksaca, E. A., July.2018. Hemorrhoids and related complications in primigravid pregnancy☆. Journal of Coloproctology (Rio de Janeiro), Volume vol.38 no.3.
[16]. Cottrell BH, Shannahan MD. Effect of the birth chair on duration of the second stage labour and maternal outcome. Nurs Res 1986; 35:364–7.
[17]. Thompson JF, Roberts CL, Currie M, Ellwood DA. Prevalence and persistence of health problems after childbirth: associations with parity and method of birth. Birth 2002; 29:83–94.

Dr. Sonya Akter, et. al. "Anal fissures and Haemorrhoids during pregnancy and after childbirth." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 19(11), 2020, pp. 13-18.