

Prevention and management of postnatal breast complications

G. Ganguli • N. Dhavan • K. Mukherji • Meena Dayal • R.C. Pandey

M.L.N. Medical College, Allahabad.

Summary : This study was conducted in the Department of Obstetrics and Gynaecology. A detailed history was taken regarding age, parity, socioeconomic status, dietary history, personal history, past history, mode of delivery, place of delivery, initiation of feeds and time of milk let down in previous pregnancies, duration of feeding and any difficulty encountered by them. A thorough and complete examination was then carried out with special emphasis to breast in sitting posture, bending forward position and in recumbent position.

Routine investigation including haemoglobin, total and differential leucocyte counts, fasting and postprandial blood sugar, complete urine examination was done. Leucocyte and bacterial counts in breast milk was done. Rectal swab culture of infants was done to see whether the intestinal flora of infants was altered in cases of breast complications.

Six hundred patients were examined in the postnatal period out of which 120 (20.0%) patients were found to have breast complications. Breast engorgement 52 (43.33%) was the most common complication followed by cracked nipples 19 (15.83%), retracted nipples in 12 (10.0%), cracked and sore nipples in 10 (8.33%), cracked and retracted nipples in 9 (7.5%), failing lactation in 9 (7.5%) and breast abscess in 4 (3.33%) patients. 24 (20%) booked patients had complications while 96 (80%) unbooked patients had complications. Expression of breast milk with breast pumps and manual expression was performed in patients with breast engorgement. Nipple shields were applied in cases of cracked and retracted nipples. All the 4 cases of breast abscesses were drained and daily cleaning and gauze packing was done.

Introduction

Breast feeding is recognised as the preferred form of infant nutrition as stated by national paediatric, obstetric/gynaecologic and family medicine societies. Obstetricians are a frequent source of contact throughout pregnancy and early child development. This contact gives them multiple opportunities to advocate breast feeding in the prenatal setting, assist with breast feeding initiation and management after delivery.

Material and Methods

The present study was conducted in the department of Obstetrics and Gynaecology at Swaroop Rani Nehru and Kamla Nehru Memorial Hospital, Allahabad. The aims of this topic were to study the complications associated with breast in the postnatal period, promotion of early breast feeding and the advantages of demand feedings. A detailed history was taken regarding age, parity socioeconomic status, dietary history, personal history and past history. Effects of caesarean section on lactation was studied. Postnatal patients were also enquired

regarding their previous mode of delivery, place of delivery, initiation of feeds and time of milk let down in previous pregnancies, duration of feeding and any difficulty encountered by them. A thorough and complete examination was then carried out with special emphasis to breast in sitting posture, bending forwards position and in recumbent position. Nipple areola, any swelling, axillary tail swelling, lymph nodes, were examined. Breast were also examined for occurrence of breast engorgement.

Routine investigations including haemoglobin, total and differential leucocyte counts, fasting and postprandial blood sugar, and complete urine examination were done. Leucocyte and bacterial counts in breast milk were done. Rectal swab culture of infants was done to see whether the intestinal flora of infants was altered in cases of breast complications.

Results and Discussion

Six hundred patients were examined in the postnatal period but of which 120(20.0%) patients were found to

have breast complications.

Majority of the patients were of 20-30 years age 10(84.77%) with mean age of 25.04 ±0.92 years. The cases in the postnatal group were mostly primiparas 73 (60.83%), followed by multiparas 38(31.67%) and grand multiparas 9(7.50%). Baer and Winikoff (1980) stated that successful breast feeding depends upon parity. Kautmann and Foxman (1991) found that puerperal mastitis is associated with parity.

Sixty four patients (53.33%) belonged to middle socioeconomic status. Salih et al (1993) studied the factors that influenced breast feeding in urban and rural communities. Sixty one (50.83%) patients were illiterates. There was a significantly different pattern of complications in the LSCS and normal delivery groups.

Out of 73 primiparas 43 (59.72%) had delivered normally; 23(31.94%) multiparas out of 38 had delivered normally and 6(8.33%) grandmultiparas out of 9 had delivered normally. Breast engorgement was found in 25 (52.08%) cases out of 48 cases of Caesarean section and in 27(37.5%) cases out of 72 cases in the normal delivery group. There is about two times more risk of breast engorgement in caesarean delivery as revealed by odds ratio (OR=2). There is two times more risk of breast engorgement in cases of both cracked and retracted nipples (OR = 2).

11(78.57%) multiparas and 2(50.0%) grand multiparas had past history of breast engorgement. The association of breast engorgement in present pregnancy and past history of breast engorgement was statistically significant (P<0.001). Hill and Humenick (1994) found that previous breast feeding experience of the mother is a more critical variable than parity in predicting engorgement. Second time breast feeding mothers regardless of delivery method had more incidence of breast engorgement. 42(82.35%) presented with pain, raised temperature of breast and at least one episode of raised systemic temperature. Cragin (1916) recognized and stated that the painful distended breast gave rise to a slight temperature without the presence of infection. This fever subsided over the next 12 hours without treatment.

Out of 52 patients, 8(15.38%) patients had leucocyte

count greater than 10⁶, 33(63.46%) had counts less than 10⁶ and 11(21.15%) had no leucocyte count. All the cases of breast abscess 4 (100%) had counts greater than 10⁶. Occurrence of leucocytes in both the above cases was statistically significant (P<0.001). Six (11.54%) cases of breast engorgement had bacterial counts less than 10³, 1(1.92%) had counts greater than 10³ and 45(86.54%) had no bacterial counts. All the 4(100.0%) cases of breast abscess had counts greater than 10⁴. One case (1.92%) out of 52 cases of breast engorgement showed evidence of infection, 6(11.54%) cases had non-infectious inflammation and 38(73.08%) cases showed evidence of stasis. Cases with infection showed cultures of staphylococcus aureus. Antibiotics were given according to sensitivity. Thomson et al (1984) on the basis of leucocyte count of milk and quantitative cultivation for bacteria, classified the cases with inflammatory symptoms of the breast with milk stasis (Count of <10⁶ leucocyte and <10³ bacteria), non infectious inflammation (Counts of >10⁶ leucocytes and >10³ bacteria). The course of milk stasis was of short duration. Emptying of the breast in cases of non infectious inflammation decreased the duration of symptoms and increased the rate of a good outcome to 50%. The addition of antibiotic therapy resulted in a good outcome in 96% of the cases and a further reduction of the persistence of symptoms.

Out of 10 cases of sore nipples, improper position of feeding was found in 8 (80%) cases. This association was highly significant (P<0.001). Milinikow and Bedinghaus (1994) have said that ensuring proper position of the infant at the breast and attention to the let down reflex is the recommended method for prevention and treatment of sore nipples. Out of 66 primiparas, 47(71.27%) showed improper position of feeding, 4(12.90%) out of 31 multiparas showed improper position of feeding. Seven (70%) primiparas and 3(30%) multiparas had sore nipples. There is 1.56 times more risk of developing sore nipples in the primiparas than in multiparas.

Out of 48 patients of LSCS, 5(10.42%) developed sore nipples and 5(6.94%) cases out of 72 normal deliveries developed sore nipples. There is 1.56 times more risk of developing sore nipples in cases of caesarean section.

Five (55.56%) patients out of 9 showed improper position

of feeding. There is 1.77 times more risk of lactational failure in cases of improper position of feeding. Seven (9.59%) out of 73 primiparas showed lactational failure and 2 (4.26%) out of 47 multiparas showed lactational failure. There is 2.39 times more risk of lactational failure in primiparas than multiparas. Failing lactation was found in 6(12.5%) cases of LSCS and 3(4.17%) cases of normal delivery. There is 3.29 times more risk of lactational failure in LSCS than in cases of normal delivery. Insufficient emptying of the breast is the commonest cause of failure of lactation (Waller 1946). Applebaum (1970) stressed that insufficient milk is caused by inappropriate advice and faulty technique usually the introduction of supplementary feeds that reduce sucking on the breast and these reduce milk secretion. Fatigue and sore nipples are common complications in postnatal period and are responsible for discontinuation of breast feeding.

Breast abscess was found in 3(4.11%) primiparas and 1(0.02%) multiparas. There is 1.97 times more risk in the primipara of occurrence of breast abscess. Twenty four (20%) booked patients had complications while 96(80%) unbooked patients had complications in the postnatal period.

Early initiation and demand feeding was promoted in all cases. Immediate let down of colostrum occurred when the baby started suckling. Babies of patients with caesarean section were laid prone on the mothers belly and allowed to suckle immediately in the post-operative room. Vestermark et al (1991) studied the influence of the mode of delivery on initiation of breast-feeding. Ozmen (1992) showed that the chance of the infants born by caesarean section of being fed by the maternal milk could be increased by early and regular suckling of maternal milk. Patients with failing lactation 9(7.5%) were given tablets of metoclopramide thrice daily and frequent breast feeding. Patients with retracted and cracked nipples were asked to apply allantoin cream and nipple elevating exercises and to use nipple shields for feeds. Nicholson (1993) evaluated the use of nipple shields by breast feeding women and found that on discharge from hospital after 3 months, patients who were not using nipple shields were significantly less likely to be breast feeding.

Expression of breast milk with breast pumps and manual

expression was performed in patients with breast engorgement. Injection syntocinon (10 IU) was given in cases where milk expression was painful. All the 4 cases of breast abscesses were drained and daily cleaning and gauze packing was done. Ajao et al (1994) compared the primary closure of breast abscesses and a negative suction drain with the conventional gauze packing and daily dressing and reported shorter healing period, better scar formation & reduction of cost in terms of labour and material in the former group.

Conclusion

In this study attempts have been made to reduce complications encountered in breast feeding women and to promote successful breast feeding in all the women. Rural women have false beliefs regarding colostrum and start feeding their child after 3rd-4th day when milk let down occurs. Education regarding the advantages of colostrum and early initiation of feeds was done.

Bibliography

1. Ajao-OG, Ladipo-JK, al-Saigh-AA, Malakani-T, West-Afr-J-Med 13(1); 28:1994.
2. Applebaum RM, Paediatrics clinics of North America, 17:203:1970.
3. Winikoff, Beverley, Baer Edward C. Am.J. of Obst & Gyn: 138:105:1980.
4. Cragin E.B. Obstetrics (ed. 1). Lea Philadelphia; 1916.
5. Hill P.D., Humenick SS: J. Hum. Lact. 10(2): 79: 1994.
6. Kaufmann R., Foxman B. : Social Science Medicine 33(6): 701: 1991.
7. Milinkow., Bedinghaus J.M.: J-Fam Pract. 39(5) : 56:1994.
8. Nicholson W.L.: J Aust-Coll-Midwives 6(2): 18:1993.
9. S. Ozmen M.: Biol Neonate 62(1): 67 8:1992.
10. Salih-MA, el-Bushra-HM, Satti-SA, Ahmed, M-el F, Kamil-IP : Trop-Geogr-Med 45(4): 171:1993.
11. Thomson Andus C, Espersen T, Maigaard S : Am J Obst Gyn. 149:492; 1984.
12. Vestermark V., II. Gdall C.K., Birch M., Plenov G., Toftager-Larsen K.: Eur.J.Obst. Gyn. Reprod. Biol. 38(1) : 33: 1991.
13. Waller H.: Arch. Dis. Child. 21, 2. 1946.