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Bilateral Necrotizing Fasciitis of Breast: A Case Report and review of literature

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Abstract: *Necrotizing fasciitis is a life-threatening, rapidly spreading, infection located in subcutaneous tissue up to the deep fascia. It usually occurs in perineum and extremities but necrotizing fasciitis of breast is a rare condition which may lead to systemic infection and death. Hence we report a case of bilateral necrotizing fasciitis of Breast with systemic septic shock in a young lactating woman. Patient was managed with repeated wound debridement and dressing, successfully avoiding mastectomy. Conclusion was that despite having a good vascularity, necrotizing fasciitis, rarely, can occur in breast for which mastectomy may be required but not necessary.*

Key words: Necrotizing fasciitis, Breast, cellulitis

I. Case Report

A 19-years old woman, lactating mother of 3 months old male baby, reported to our hospital with complain of Pain and swelling right breast for 10 days, Blackening of skin over rt. breast 4 days and Swelling in left breast for 2 days. She also had high grade fever for 2 days. There was history of cracking of right nipple for which she had applied some herbal medication over right nipple and breast.

On clinical examination the patient was febrile and dehydrated. Pulse-140/min, BP- 90/60mmHg, respiratory rate- 26/min. Local examination showed necrosis of skin of right breast with extensive slough on peripheral margins; nipple-areola complex was spared. Inflammation was extending up to left breast and lateral chest wall on right side. Skin over medial side of left breast was pale thinned sloughed out while lateral part was erythematous with induration (figure-1). Bilateral axillary lymph nodes were enlarged.

Figure -1 Bilateral necrotizing fasciitis of breast

Investigations showed haemoglobin- 6.8mg/dl, total leucocyte count- 3250/cumm. Serum electrolyte were deranged sodium-100mMol/L, potassium- 3.24U/L, chloride- 88.4mMol/L. Liver function tests were slightly deranged. Overall features were indicative of septicemia. The patient was given inj. Amoxicillin-clavulanic acid, inj. Amikacin and inj metronidazole empirically. Complete and aggressive surgical wound debridement was done until healthy, viable, bleeding tissue at edges were seen.

Gram staining and culture was positive for monomicrobial infection- *klebsiella pneumonia* which was sensitive for ampicillin, azithromycin, aztreonam, amikacin, cephalosporins, levofloxacin, and piperacillin+tazobactam. Histopathology of the excised tissue showed extensive acute pyogenic inflammatory infiltrate with and extensive necrosis.

Daily wound debridement and sterile dressing with hydrogen peroxide and EUSOL was done untill no further necrotic or infected tissue was seen (figure-2).

Figure -2 Necrotizing fasciitis extending over right lateral chest wall

Blood and fresh frozen plasma transfusion, high protein diet, fluid and electrolyte supplements were given to the patient. According to culture and sensitivity inj. Piperacillin-tazobactam, inj. Levofloxacin, inj. Amikacin and inj. Metronidazol was given. Patient improved gradually and wound healed with healthy granulation tissue (figure-3). Later on split skin grafting was done.

Figure-3 Healthy granulated wound after successive dressing

II. Discussion

Necrotizing fasciitis was first described by Joseph Jones in 1871. Dr. B. Wilson coined the term 'Necrotizing fasciitis' in 1952 and described it as necrosis of subcutaneous tissue along with fascia sparing the underlying muscle groups (1). It is also known as: **"**flesh-eating" bacteria or β-hemolytic streptococcal gangrene, Meleney ulcer, acute dermal gangrene, hospital gangrene, and necrotizing cellulitis. It is a severe life threatening soft tissue infection characterized by a fulminent course and a high mortality (1,2). It usually involves extremities, perianal region and scrotum, after history of minor injuries. Necrotizing fasciitis of the

breast is a rare condition. It may result in systemic toxicity and fatality. It is usually associated with pregnancy, lactation, alcoholism, chronic illness, diabetes, malnutrition and HIV (3). Most commonly it is polymicrobial i.e type-l in nature but in our case it was monomicrobial type (type ll) associated with lactation and malnutrition.
Early recognition of necrotizing fasciitis may be difficult as early evolving necrotizing fasciitis looks deceptively benign with lack of specific diagnostic clues. A high degree of suspicion and low threshold to prompt surgical intervention should be dictum. The diagnosis of necrotizing fasciitis is predominantly a clinical diagnosis. The Laboratory risk indicator for necrotizing fasciitis (LRNIEC) score (4), recently described by Wong et al, is a diagnostic adjunct to discriminate b/w necrotizing fasciitis and non necrotizing soft tissue infection. It includes 6 factors- CRP, Leucocytes count, Haemoglobin, S. Sodium level, S. creatinine level and blood glucose level. Each factor is given specific point and cumulative score ≥6 raises the suspicion of necrotizing fasciitis.

In literature only four cases of necrotizing fasciitis of breast have been reported in India. Out of four cases, two were managed conservatively and in other two cases mastectomy was done (5). Our case is first case of bilateral breast involvement in literature, which was diagnosed early and was managed conservatively without undergoing mastectomy in a lactating mother.

The treatment is early and complete surgical debridement with antibiotics coverage according to culture and sensitivity and other supportive and resuscitative measures. Complete surgical debridement means excision of all non-viable tissue including deep fascia, and in case of breast, mastectomy may be required if not detected early. To ensure that infection has not extended, a repeat surgical exploration 24-48 hrs later, becomes essential (2). Broad spectrum antibiotics should be started empirically as soon as possible & change them according to culture and sensitivity. Beside these, patient requires intensive care which allows in providing a good physiological support along with close monitoring of vitals of the patient.

III. Conclusion

1. Necrotizing fasciitis of breast is a rare condition and it can be fatal in outcome.
2. Early diagnosis and complete surgical debridement is the treatment of choice and in some cases mastectomy may be required.
3. High degree of suspicion and low threshold to prompt surgical intervention should be dictum in cases of women with risk factors having a breast condition.

References

[1]. B Wilson. Necrotizing fasciitis. Am Surg. 1952;18:416–31
[2]. A Subramanian, G Thomas, A Lawn, P Jackson, GT Layer. Necrotizing soft tissue infection following mastectomy. JSCR.2010:1–4
[3]. S Hasham, P Matteucci, PR Stanley, NB Hart. Necrotising fasciitis.BMJ. 2005; 330:830–33
[4]. Chin-Ho Wong, Tan Bien-Kien, Plastic and Reconstructive Surgery. 2008;122(5):e151–2.
[5]. Yaji P, Bhat B, E H. Primary necrotising fasciitis of the breast J Clin Diagn Res. 2014 Jul;8(7)