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Puerperal sepsis: An unusual presentation

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Abstract

Puerperal sepsis is the infection occurring in the genital tract after delivery and is the third most common cause of maternal death worldwide. According to WHO it accounts for one fifth of maternal death worldwide annually. The most common culprit organism is Group A streptococci. Puerperal sepsis can be triggered by anemia, prolonged labor, frequent per vaginal examination. we present a case of bilateral upper limb and lower limb gangrene triggered by puerperal sepsis.

Keywords: Puerperal sepsis, gangrene, genital tract infection, bilateral limbs

Introduction

Puerperal sepsis is defined as infection of the genital tract after delivery. It is the third most common cause of maternal death worldwide [1]. According to WHO it accounts for 15-20% of maternal death annually [2]. Most commonly puerperal sepsis is caused by Group A streptococci. We present a case of bilateral upper limb and lower limb gangrene triggered by puerperal sepsis.

Case Presentation

A 22 year old P3L3 woman presented on second day (day) postnatally to emergency casualty with complaint of high grade fever with bluish discoloration of hands and feet and petechial rash all over body. Patient had vaginal delivery at home by local dai. There was no prior history of cold or heat intolerance, tobacco smoking, collagen vascular disease or any significant family history. On examination patient was febrile, tachypneic with pallor and gum bleeding. Pulse and BP was stable. Extremities were cold with blackish discoloration of both hands and feet (figure 1 and figure 2). On per abdominal examination uterus was well contracted with foul smelling discharge per vaginum. Diagnosis of puerperal sepsis with gangrene was made.

On investigation her hemoglobin was 5.2g/dl with peripheral smear of normocytic hypochromic with hyper segmented neutrophils, total leukocyte count 25500, platelet count of 12000. Liver function test was normal with SGOT/SGPT/ALP-31/32/163 with bilirubin 1.6mg/dl. Kidney function test was urea/creat-141/1.1, DIC profile was normal. On further investigations serum LDH was 800 AND CPK 664IU/L. but schistocytes in peripheral smears were <1% that ruled out autoimmune warm antibody induced hemolytic anemia. On sepsis workup blood culture and urine culture was negative, high vaginal swab had commensals, but serum procalcitonin was raised 3.83ng/ml. Patient was further evaluated for other causes of gangrene –Lac, acl, β 2gp was negative, RA and ANA was negative.

On transvaginal ultrasound cavity was empty. In imaging color Doppler was suggestive of normal bilateral upper limb good forward flow and dampened monophasic flow in distal calf arteries (<10cm/sec) without any focal stenosis. Surgical consultation was done and broad spectrum antibiotics were started and was taken up for below knee amputation and finger amputation after appearance of line of demarcation (figure 1).

Amputation was done 4 days after appearance of line of demarcation. It was done by open guillotine method and 10 days later skin grafting done. Patient was started on cilostazol –a phosphodiesterase inhibitor that inhibits platelet aggregation and widens arteries, patient was also started on Low molecular weight heparin- enoxaparin twice daily. Fever subsided after 48 hours of antibiotics. Platelet counts and kidney function started improving after 8 days of antibiotics.

Discussion

In our case patient was young with no prior evidence of connective tissue disorder,

any major occlusive disease, or any other identifiable cause for gangrene. She developed peripheral symmetrical gangrene even after being delivered at hospital. Although sepsis could not be documented by cultures but could be suspected based on CRP levels and serum procalcitonin levels. Puerperal sepsis is most commonly caused by Group A beta-hemolytic streptococcal infection.

Although case reports of postpartum gangrene in pregnancy have been reported, mainly due to underlying vascular occlusive disorders or due to use of ergot alkaloids following delivery in patients with underlying vaso-occlusive disease [3]. A recent report found sepsis to be a major cause with a high amputation rate and mortality [4]. We also emphasize on need of multidisciplinary team of hematologist, infectious disease expert, microbiologist and critical care specialist and need for them to work in unison to hamper the disease process for early recovery of patient and limiting the damage caused by disease process.

Signs and symptoms of sepsis should be well recognized by all healthcare professionals who care pregnant and recently delivered women. If sepsis is suspected women should be referred to higher centre immediately so that treatment can be carried out promptly.

We present this case to highlight importance of identifying and treating earliest symptoms of puerperal sepsis with broad spectrum antibiotics and need for thorough investigation to rule out other causes of peripheral gangrene.

Conclusion

Peripheral gangrene as a result of septic emboli in puerperal sepsis is a rare condition which needs early diagnosis and prompt treatment. All pregnant women should be given oral and written about the risk of infection and sepsis and ways to prevent them.

References

1. Berg CJ, Callaghan WM, Syverson C *et al.* Pregnancy related mortality in united states, 1998 to 2005. *Obstet Gynecol* 2010;106(6):1302.
2. United Nations. Sustainable development goals. United nations. new York, 2015 (Available at <http://sustainabledevelopment.un.org>, accessed 16 December 2016)
3. Dam AK, Mishra JC. Managing ergot-induced gangrene: the anesthesiologist as a key player. *Anesth Analg* 2002;95(2):409-10.
4. Ghosh SK, Bandyopadhyay D, Ghosh A. Symmetrical peripheral gangrene: a prospective study of 14 consecutive cases in a tertiary-care hospital in eastern India. *J Eur Acad Dermatol Venereol*, 2010, 24.



Fig 1: Gangrene of upper limb



Fig 2: Gangrene of lower limbs