

Kaposi's Sarcoma in Pregnancy: Case Report

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Abstract

A 34 year-old multiparous, P₅ G₅ patient presented at 30 weeks gestation by dates with generalised odema, generalised skin lesions and generalised lymphadenopathy. She was HIV seropositive and taking anti-retroviral therapy. She was anaemic with a haemoglobin of 4.3g/dl and low platelet count of 57. She was transfused 4.0 units of blood. She underwent fine needle aspiration of lymph nodes. The histopathological report confirmed a Kaposi's sarcoma. She continued to have anaemia and thrombocytopenia despite repeated blood transfusions. Clinically she started having epistaxis necessitating the need to deliver her. She had failed induction of labour and was delivered by Caesarean section. Post-operatively she needed further blood transfusions and recovered well. The baby died after 2 days from respiratory distress syndrome. She was referred for chemotherapy.

Keywords

Kaposi's sarcoma; pregnancy; HIV; anaemia; thrombocytopenia

Introduction

A diagnosis of Kaposi's sarcoma in pregnancy poses challenges in the management of the patient. Kaposi's sarcoma is an opportunistic tumour that develops with increased frequency (100 000- fold) after HIV infection [1]. It is one of the commonest cancers in HIV infected patients [2]. Herpes virus also known as herpes virus 8 is a carcinogenic casual agent of Kaposi's sarcoma [2,3,4].

Case Presentation

On examination she was found to be ill-looking, with a puffy face and pale. She had generalised patchy lesions on the face, mouth and eyes. She had generalised lymphadenopathy. She had a temperature of 36.5°C. She was tachypnoeic with a respiratory rate of 25 breaths/minute and tachycardic with a heart rate of 103 beats/minute. Her BP was 88/47. On the respiratory system, there good bilateral air entry into her lungs.

She had a gravid uterus of 29 weeks gestation by palpation and a positive fetal heart by pinnard auscultation. She was admitted to the hospital and nursed in high dependency setting. She was given oxygen per face mask and given intravenous fluids. She was prescribed corticosteroids for fetal lung maturation. The investigations done showed an Hb of 4.3g/dl, HCT 14.3, MCV 102fl, MCH 30.3pg, MCHC 28.7g/dl, WBC 6.13 and platelet count of 57. This blood test showed a macrocytic anaemia and

thrombocytopenia. The urine dipstick was normal. Liver function tests, urea and electrolytes were all normal. An ultrasound scan showed a live fetus of 27 weeks 5 days gestation, with adequate liquor volume and estimated fetal weight of 1150g. This was a growth restricted fetus. She was transfused 4.0 units of packed cells. The post transfusion Hb was 9.7g/dl, MCV 89.6fl and platelet count of 25, showing an improvement of the anaemia but a deteriorating platelet count. The chest-X-ray was normal. A fine needle aspirate of lymph nodes was done. This confirmed a Kaposi's sarcoma. A multidisciplinary referral to oncologists was made and they reviewed the patient and recommended chemotherapy after the treatment of the anaemia and thrombocytopenia.

After 5 days in hospital she developed epistaxis and another 2.0 units of blood were given. Another check FBC showed an Hb of 7.8g/dl, WBC 5.83 and platelet count of 38. 4.0 units of platelets were ordered but were not available from the blood bank at that time. Since there was no improvement in the haematological indices and the patient started bleeding (epistaxis), the decision to induce labour was taken. A dose of 25ug of misoprostol was inserted into the posterior fornix of the vagina. This was repeated after 6 hours but no labour ensued.

A Caesarean section was ordered. The operation was done under general anaesthesia. A live baby boy weighing 1200g was delivered. The Apgar score was 4, 7 and 8 at 1, 5 and 10 minutes respectively. Haemostasis was achieved during the operation. Post-operatively she was admitted to the Intensive Care Unit. The immediate post-operative check Hb was 5.9g/dl and platelet count was 17. She received a further 2.0 units of blood bringing the total units of blood transfusion since admission to 8.0 units. She was discharged to the postnatal ward after 2 days.

On day 2 post-operatively she had a marked reduction in body swelling and no epistaxis. A repeat FBC showed an Hb of 8.4g/dl, WBC 10.93, MCV 85.1fl, MCH 28.4pg, MCHC 33.3g/dl, platelet count of 61. There was an improvement in these blood indices with most returning to normal. Unfortunately the baby died after 2 days from respiratory distress syndrome. She was referred to oncologists for further management.

Discussion

Kaposi's sarcoma causes significant morbidity from mucocutaneous involvement and mortality from complications of visceral sites of disease such as the gastrointestinal tract and liver [1]. In pregnancy it compromises both maternal and fetal health leading to poor or adverse outcomes. Kaposi's sarcoma, HIV/AIDS and pregnancy all can cause haematological disorders such as anaemia and thrombocytopenia. The management of this case posed a few challenging issues. The patient was very ill, anaemic and thrombocytopenic with a growth restricted fetus.

Kaposi's sarcoma has been described in pregnancy occurring in the lung [5,6] and trachea [7]. It can present as skin lesions, lymphadenopathy or respiratory compromise [5,6,7]. There have been rare cases of HIV seronegative patients with Kaposi's sarcoma [8].

The treatment of Kaposi's sarcoma is chemotherapy and the tumour is potentially responsive [6]. Patients with advanced disease such as widespread mucocutaneous disease, lymphedema and visceral involvement are treated most effectively with cytotoxic agents [1]. The cytotoxic agents used include a combination of doxorubicin, paclitaxel, bleomycin and vinblastine which have been given in pregnancy

resulting in a live growth restricted baby [1,9]. Cytotoxic agents affect all rapidly growing cells including fetal cells. Other side effects include emesis, mucositis, bone marrow suppression, renal and hepatic dysfunction. In this case there was already significant anaemia and thrombocytopenia, chemotherapy would worsen these with potentially life-threatening consequences.

Conservative management has also been described with good outcomes [10]. The risks associated with conservative management include risking maternal health with widespread tumour progression. In this case conservative management would have resulted in maternal death from haemorrhage. A rare case of Kaposi's sarcoma in a 2 week old infant born to a mother with Kaposi's sarcoma/AIDS has been reported [11] in the literature.

Kaposi's sarcoma in an HIV seropositive pregnant patient complicates the pregnancy. There are emotional, ethical and clinical dilemmas about how to best manage the condition. Maternal health takes precedence over fetal outcomes as happened in this case.

Conclusion

Kaposi's sarcoma can occur in pregnancy in both seropositive and seronegative patients. Therefore any suspicious lesions or enlarged lymph nodes must have early recourse to a biopsy to obtain histopathological diagnosis and early treatment. Kaposi's sarcoma causes significant fetal and maternal morbidity and mortality. When maternal health is in danger, it is advisable to deliver the patient as this may lead to an improvement in the patient's condition and/or allowing further therapy like chemotherapy to be undertaken.

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