

## **SPONTANEOUS MASSIVE VULVA SWELLING IN PREGNANCY: A CASE REPORT.**

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### **ABSTRACT**

Spontaneous massive vulva edema is not common during pregnancy, but its presence possesses management challenges with significant patient anxiety and discomfort. We report a case of spontaneous vulva edema in a 24-year old primigravida at 28 weeks gestational age having twin gestation, with one anencephaly and polyhydramnios. The vulva edema appeared and rapidly increased in size. Reported causes of vulva edema were ruled out. She had emergency caesarean section and the edema subsided spontaneously within 12 hours post-operatively. The aim of this report is to alert clinicians about the possibility of spontaneous massive vulva swelling which may not respond to medical management apart from delivery.

### **INTRODUCTION**

Spontaneous massive vulva edema is not common during pregnancy, but its presence possesses management challenges with significant patient discomfort especially pain and difficulty in ambulation.<sup>1-4</sup> Few case reports of massive vulva edema were searched in the literature but very rarely is the occurrence of such massive edema without any underlying medical condition. Massive vulva edema has been reported as a rare complication of diabetes in pregnancy,<sup>1,2</sup> severe pre-eclampsia,<sup>2</sup> toxocoloysis,<sup>6,7</sup> hypoproteinemia<sup>8,9</sup> and severe anaemia.<sup>10</sup>

In this report we described a case of spontaneous massive vulva edema in a 24 year old primigravida with twin gestation at 28 weeks which resolved spontaneously after delivery.

### **CASE REPORT**

A 24 year old primigravida at gestational age of 28 weeks and 4 days was admitted in our facility with a main complaint of swelling of external genitalia of six days. She was admitted for 4 days prior to her presentation at a comprehensive health centre before referring her to our facility. The onset was

spontaneous, with no prior history of elevated blood pressure, gestational diabetes or insect bite. On examination she was in painful distress, not pale, afebrile, with lower limb edema bilaterally and a blood pressure of 120/80 mmHg. Abdominal examination revealed a gravid uterus, fundal height of 38cm, with multiple fetal poles palpable and leading twin in cephalic presentation, and two normal fetal heart rates. Examination of the external genitalia revealed a swollen, tender vulva, excoriation at the vaginal posterior fourchette but no obvious vaginal discharge (Figure 1). Obstetric ultrasound revealed diamniotic-dichorionic twins with twin two anencephaly and polyhydramnios at 28 weeks of gestation age. Haemoglobin level was 9.8 g/dl. Urine dipstick revealed glucosuria of plus one but negative for protein. Fasting blood glucose and 2 hours postprandial were 3.4 and 4.1 mmol/L

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respectively. Electrolytes, urea and creatinine were within normal range. Total protein and albumin were also normal. She was commenced on broad spectrum antibiotics, a course of dexamethasone injection to improve lung maturity, pethidine/pentazocine injection PRN because of severe pain, sitz bath with chlohexidine solution and Chymoral, an antitypsin agent. On the 4<sup>th</sup> day on admission, she started having regular uterine contractions with the rapidly increasing vulva edema and intractable vulvodinia thus was scheduled for a caesarean delivery. Diamniotic-dichorionic twins were delivered: first twin was male with birth-weight of 1.3kg and Apgar score of six and eight at first and fifth minute respectively, second twin was an anaecephalic female with birth-weight of 0.9kg, and Apgar scores of two at first minute but died before the fifth minute. Vulva edema reduced drastically in the immediate post operation (Figure 2) and has resolved completely at 12 hours post-operation without any further treatment. (Figure 3).She was discharged on third day post-operation.

## **DISCUSSION**

Spontaneous massive vulva edema during pregnancy is uncommon condition although usually benign. The condition should not be considered as totally innocuous since it might be associated with some conditions such as pre-eclampsia,<sup>2-5</sup> diabetes,<sup>1,2</sup> severe anaemia with or without heart failure<sup>10</sup> and hypoproteinemia.<sup>8,9,11</sup> In fact, previous postpartum death has been reported to be precipitated by this condition.<sup>1,12-14</sup> The patient's blood pressure was essentially normal throughout the admission and blood glucose screening was within the normal range. There was no associated chronic pelvic pain and no visible varicocele vein on or around vulva and the legs.

There is no standard way of managing this condition, as there is paucity of cases reported in the

literature.<sup>15,16</sup> It is important to find the underlying cause, as management is influenced by the cause. However, in our patient, most previously reported predisposing factors were absent. Symptomatic and supportive care was the modality of management. Judicious analgesics and anxiolytics were required because of pain and anxiety. Mechanical drainage has been reported in some occasion.<sup>1,15</sup> Some modes of management have been described in the literature such as linear incisions on the medial aspects of the labial minora to drain clear transudate.<sup>2</sup> However, it is not known whether there is a risk of delayed healing of incised vulva skin or of super-infection in the presence of edema. Reynolds reported the use of epidural anaesthesia which allowed for labor monitoring with assessment of cervical dilation.<sup>13</sup> Abdominal delivery is the most common route of delivery reported. Our patient also had an abdominal delivery because of the added risk of prematurity, twin gestation and presence of an ancephalic second twin.

In most cases, edema of the vulva will resolve spontaneously after delivery<sup>3,5,8,14,15</sup> as in our case. In our case, the aetiology is most likely to be secondary to multiple gestations, with polyhydraminous. Abdominal delivery was our preferred mode of delivery and in this case, the vulva edema subsided spontaneously after caesarean delivery.

## **CONCLUSION**

Vulva edema may be rapidly progressive in nature with associated pain, anxiety and marked discomfort. Identification and treatment of the associated factors and likely causative factor is vital to its management, but if none is identified, delivery may be all that is required.

## **CONSENT**

An informed consent was obtained from the patient for this publication.





Figure 1



Figure 2



Figure 3

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