CASE REPORT

'Vulval oedema': a conundrum!

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SUMMARY

Massive oedema of the vulva appears to be a sequel of an underlying systemic disease in pregnant women. Isolated vulval oedema in pregnancy is rare. Vulval oedema has been treated, depending on pathophysiology, with steroids, furosemide, albumin and continuous epidural analgesia. We present a case of vulval oedema, where the oedema was confined to the labia minora in a healthy young pregnant woman. The patient was in pain and extreme discomfort due to the labial swelling, and caesarean section was being considered for delivery as the massive oedema would obstruct the birth canal. The swelling, however, resolved successfully by simple drainage. In the literature, there have been cases delivered by caesarean section as vulval swelling was causing an obstruction.

BACKGROUND

Massive isolated oedema of the vulva is rare and appears as sequelae of underlying systemic disease in pregnancy.^{1 2} We present a case of massive vulval oedema confined to the labia minora.

CASE PRESENTATION

A fit and healthy 19-year-old primigravida was referred from primary care in her 35th week of pregnancy, with vulval pain and swelling. The site and size of the swelling was a cause of immense discomfort and pain (she was unable to sit or wear underclothes).

Examination revealed bilateral swelling of the labia minora, right (10×5 cm) and left (5×5 cm), which was tender to touch and erythematous (figure 1). The patient was being managed as pre-eclamptic as she had one episode of raised blood pressure on admission; she was also started on oral antibiotics for a possible urinary tract infection. She was treated for possible candidiasis and started on acyclovir for herpes, with no improvement. Caesarean section was being considered for delivery as the massive vulval swelling would cause an obstruction.

INVESTIGATIONS

The patient was noted to have severe hypoalbuminaemia (16 g/L); total protein (44 g/L) and globulin were normal. The alkaline phosphatase was (149 IU/L), which was normal for this patient's stage of pregnancy. Twenty-four hour urine protein was 2.52 g and the patient's renal function tests were normal. She had mild anaemia with haemoglobin of 10 g/dL.

Figure 1 Massive vulval oedema involving the labia minora and causing immense discomfort to the patient.

DIFFERENTIAL DIAGNOSIS

The patient was being managed as a case of pre-eclamptic (1 episode of raised blood pressure), candidiasis and herpes with no improvement.

TREATMENT

The patient was eventually referred to the specialist vulval clinic run by the consultant gynaecologist and dermatologist. A sterile 22 gauge hypodermic needle was used to make four punctures on each labia, and the swelling was drained. The symptoms resolved immediately and did not recur (figure 2). The patient was noted to have severe hypoalbuminaemia (16 g/L).

No other medication for local application was considered as the site made it difficult, and the obvious discomfort of the patient prompted a more radical approach; as with prior experience, the consultant had success with drainage.

OUTCOME AND FOLLOW-UP

The swelling resolved immediately and did not recur.

Figure 2 Appearance of the labia minora immediately following drainage.

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Learning points

- ▶ Vulval oedema can present a diagnostic dilemma, as is apparent in our case. We would also like to increase awareness regarding simplicity of management.
- ▶ Our patient needed operative delivery for severe preeclampsia, but, otherwise, vaginal delivery was not contraindicated because the vulval swelling was successfully drained. Caesarean section has been performed in some cases where swelling was causing obstruction.¹⁻³

This patient developed severe preeclampsia in the following weeks and was delivered by caesarean section.

DISCUSSION

In the literature, reported cases of isolated vulval oedema have been associated with severe preeclampsia, diabetes mellitus, septicaemia, anaemia, tocolytic therapy, renal problems,

hypoalbuminaemia, local trauma, infection, multiple pregnancy and obstructed labour.¹⁻³ The vulval oedema, depending on its pathophysiology, has been treated with steroids, furosemide, albumin and continuous epidural analgesia.¹⁻²

In this patient, the severe hypoalbuminaemia appears to have been the cause for vulval oedema, however, it did not recur, though she continued having proteinuria.

Contributors The patient was managed by LG. NA and LG were involved in the literature search and writing up of this case report.

Competing interests None declared.

Patient consent Obtained.

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