

Lymphoedema of the Inner Thighs in Late Pregnancy

Sir,

We report 2 cases of rapid onset of lymphoedema of the inner thighs in late pregnancy, which resolved shortly after delivery. A combination of venous obstruction and impaired lymphatic drainage was considered to have been the cause. Acquired lymphoedema occurs in association with infectious processes, malignancy and trauma. During pregnancy there is increased venous pressure in the pelvic and femoral vessels, increasing the load for the lymphatics. In most women this increased demand is virtually symptomless, due to the great capacity of the lymphatic system.

CASE REPORTS

Case no. 1

A 34-year-old woman (gravida II, para I) presented at 37 weeks' gestation with red and painful areas on her inner thighs which had gradually increased in size and intensity during the past week. The symptoms were intensified in upright stance and decreased in recumbency. The pregnancy was otherwise uncomplicated. She was overweight (85 kg/170 cm), her weight having increased by 15 kg, as it had in her first pregnancy. Physical examination showed the presence of symmetrical areas of reddened, warm and indurated skin on the inner thighs in an otherwise healthy woman. A skin biopsy showed the presence of oedema in the upper corium and dilated capillaries surrounded by inflammatory tissue. The ESR was 98 mm/h (normally ≤ 40 mm/h in pregnancy), and the serum CRP level slightly increased. Other routine blood tests were normal. Ultrasonography excluded deep venous thrombosis. The patient was treated with bed rest and antibiotics. Immediately after delivery of a 4,510 g healthy girl 1 week later, the lesions began to resolve and had completely disappeared after 1 week.

Case no. 2

A 29-year-old woman (gravida II, para I) presented at 39 weeks' gestation with exactly the same symptoms as in case no. 1. In this case too the pregnancy had been uncomplicated. She was of normal weight (60 kg/170 cm), but her weight had increased by 22 kg (versus 16 kg in her first pregnancy).

As in the first case, symmetrical areas of reddened, warm and indurated skin were seen on the inner thighs at examination. She had no other symptoms. A skin biopsy showed the presence of dilated lymphatic channels, slight subepidermal oedema and an inflammatory reaction. The ESR was 100 mm/h and the serum CRP level 80 mg/l; otherwise, routine blood tests were normal. After delivery of a healthy boy weighing 4,980 g, the lesions resolved completely in the course of 2 days.

DISCUSSION

The symptoms in these 2 cases were quite alarming. Neither the obstetricians nor consultants in infectious diseases or dermatology recognized this entity. In the first case thorough investigations were made to exclude serious disease. In the other case we chose to await the development. To the best of our knowledge, there has been only one report of 2 similar cases of lymphoedema in late pregnancy, rapidly resolving

after delivery (1). The mechanisms responsible for this reaction are open to speculation. Investigation of the lymphatic system is difficult, but it is known that there are significant individual variations in anatomy and capacity (2). A slight congenital insufficiency may give rise to symptoms in situations of increased lymphatic load (3). During pregnancy there is increased venous pressure in the pelvic and femoral vessels. Secondary to this, interstitial fluid formation is enhanced. The relative obstruction of the lymphatic vessels reduces the drainage of lymph fluid, and a combination of all these factors may cause an overt lymphoedema.

Both our patients were gravida II and gave birth to very large babies. Pregnancy places a strain on the lymphatic system, as shown in a report of women with primary lymphoedema whose lymphoedema became progressively worse with every pregnancy, and irreversible after the third one (4). The predominant involvement of the inner thighs in our cases may be explained by the female anatomy. The lymphatic flow from the fundus uteri drains to the medial inguinal lymph nodes, which also drain the inner thighs (5). Our patients manifested signs of inflammatory disease both in terms of laboratory variables and at histopathological examination of biopsy material. Acute inflammatory episodes often complicate lymphoedema (also referred to as cellulitis, or even as erysipelas) and may or may not be related to bacterial infection (6). The combination of putative slight hypofunction of the lymphatics and the extraordinary circumstance of pregnancy-induced weight gain in our patients might have caused the reaction. Naturally, a pregnant woman with acute swelling of both legs requires close observation to exclude thrombotic disease, but we think the symptoms described above may constitute an entity, the possible occurrence of which is worth bearing in mind.

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