Undiagnosed Primary Hyperparathyroidism in Pregnancy: a case report

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Introduction:

Hyperparathyroidism is a rare medical disorder in young populations. It most often presents in middle age, in women, age 50-60 years

Case report:

A 40-yr-old primigravida, at 28 weeks EGA, with an intrauterine twin pregnancy from IVF, was admitted to a regional hospital complaining of nausea and vomiting. Lab tests showed leucocytosis, electrolyte imbalance, elevated serum amylase and LDH, and hypoproteinemia.

While the presentation raised concern about the possibility of acute pancreatitis, an initial diagnosis of preeclampsia was made. Antihypertensive therapy and anticoagulation (enoxaparinum 0.2ml) was started. When the patient's condition continued to deteriorate, a decision to transfer to higher level hospital was made, and she was transferred to our facility.

On admission to our hospital, the patient was somnolent, and unable to answer on questions; all history was obtained from the physician who accompanied her during transfer. Physical examination revealed edema on her face, hands and legs; hypertension (170/100) and tachycardia. A urinary catheter was placed but no urine was present.

The patient responded to gross stimuli, but verbal communication was very poor. The admitting obstetrician diagnosed uterine hypertonicity, and preparations for immediate cesarean delivery were made.

Because of the prophylactic anticoagulant therapy shortly before transfer, general anesthesia was performed. Two viable infants were delivered 35 minutes after admission: a male, weight 1150g /37cm high (Apgars 2/4/6 at 1/5/10min**)** and second male 1250g /36cm (Apgars 2/3/5). Each received a single surfactant dose and were subsequently transferred to the neonatal intensive care unit at Novi Sad Children's Hospital. The patient was extubated and transferred to the intensive care unit where she received antihypertensive therapy (Urapidil infusion - an α_1-adrenoceptor antagonist), Mg++, two antibiotics (elevated procalcitonin indicated possible sepsis), diuretics, and anticoagulation**,** but she remained unresponsive almost 24 hours later.

By the 2nd postoperative day, her condition had improved slightly - she became more responsive, with a decreased amylase level, but an increased creatinine level required dialysis. Concern for sepsis remained .

Further investigation revealed an elevated serum Ca++ (2.6mmol/l, range 1.15-1.29mmol/l), and an elevated parathyroid hormone level (834.0 pg/ml- normal range 10-65 pg/ml). With further dialysis and zoledronic acid therapy, serum Ca++ normalized, and ultrasound examination revealed a mass near the left lower lobe of the thyroid gland.

Approximately one month following CS she was discharged home. Two months after delivery, the patient had a partial parathyroidectomy performed, and recover was uneventful. She was discharged home five days after this procedure in a good condition. Both infants were eventually discharged home in a good condition (first baby 3 months after delivery, and the second, 2 months after).

Conclusion:

Hyperparathyroidism is much more common in women than men, and is relatively uncommon in both genders until the 6 decade of life, when incidence increases significantly (1). In this case, both preeclampsia and hyperparathyroidism likely contributed to the patient's clinical presentation (nausea, vomiting, confusion).

Reference: 1. J Clin Endocrinol Metab 2013 Mar; 98(3): 1122–1129.