Case Report

Pregnancy related AVM, a case report

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ABSTRACT

A 34 y/o gravida with history of c/s, presented with continuous bleeding for couple of weeks after medically induced abortion, who received PCs and diagnosed with uterine AVM. She underwent uterine artery embolization and had an episode of moderate bleeding thereafter, considering her stable vitals we decided to wait and watch. Bleeding stopped and she was discharged with good condition. When we have pregnancy related AVM without significant retained products of conception, attention to three important things may be helpful. First and most important is the location of AVM, second is hemoglobin numbers and third is β-hCG titers.

Keywords: AVM , pregnancy , c/s , hemoglobin , β-hCG

Introduction

A 34 y/o gravida 4 with a history of three c/s, had a medical abortion with 2 administration of misoprostol (8 weeks of gestation), and she presented with considerable vaginal bleeding and underwent S&C in the OR and also received 2 units of packed cell. She was discharged and after 5 days presented with continuation of bleeding and β-hCG: 3100 and was transferred to our centre for more evaluation. At the admission in our centre, her vitals were stable and had a Hb:9.8, with mild to moderate vaginal bleeding. After complete evaluation, with a negative GTN evaluation and no significant retained product of conception, uterine lower segment AVM with right-sided prominency was diagnosed based on ultrasound.

She underwent bilateral uterine artery embolisation and was discharged with a good condition. After 2 weeks of embolisation she presented with moderate bleeding episode, and considering her stable status, with a normal Hb and Hct, and declining β-hCG, we decided to wait and watch. After 2 weeks there was no bleeding and β-hCG was negative. She was discharged with follow-up recommendations.

Results and Discussion

Data of the literature reports how intrauterine surgical manipulations can be associated with an increase in immune response and angiogenesis, disturbing the uterine physiology [1] . In fact, Peitsidis et al. [2] report a systematic review of 91 studies, which highlighted the presence of AVMs acquired after curettage in 95 of the 103 patients with AVMs. But uterine surgery may not be the only cause of AVMs. In a retrospective study by Kim et al. [3] in which 19 patients who developed AVMs after delivery, about a quarter of patients had no history of curettage. In these cases the hypothesized etiopathogenetic mechanism is aberrant regression of the placental bed or abnormal vascular communication after chorionic villus necrosis. Although pelvic angiography remains the gold standard for the diagnosis of AVMs [4-6], it is not routinely used since ultrasound has a good detection [6-8]. And UAE is the treatment of choice, as it is a less invasive treatment option for patients who wish to preserve fertility. (1) In recent years the overall success rate after embolization treatment has been 88.4%, with 79.2% after first embolization and 66.7% after repeated embolization [9,10], thanks to improvements in this technique.

Conclusion

When we have pregnancy related AVM without significant retained products of conception, attention to three important things may be helpful. First and most important, is the location

of AVM, whether its at the lower part near Caesarean scar or at the upper part of uterus. Second is hemoglobin values, hemodynamic condition and the need for blood transfusion. And the third one is β-hCG level. If the patient is in need for blood transfusions and location of AVM is at the lower part of uterus, embolisation is logical and helpful. But if β-hCG levels elevates, choriocarcinoma may be present and should be ruled out. Otherwise we may just wait and observe patients in whom vitals are stable, hemoglobin is good and β-hCG is negative.

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