Case Report

Pregnancy wıth encephalocele followıng correctly applıed tubal sterılısatıon: A Case Report

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Abstract: Intrauterine pregnancy after correctly performed tubal occlusion is exceedingly rare. Encephalocele presents a rare anomaly of central nervous system. We here present an intrauterine pregnancy with encephalocele anomaly after correctly performed tubal sterilization. Intrauterine term pregnancy with encephalocele anomaly after correctly applied sterilization has not been reported previously.

KEY WORDS: *intrauterine pregnancy; tubal ligation; encephalocele.*

1. Introduction

Tubal occlusion now accounts for 10-40% of contraceptive methods throughout the world (1-3). Although tubal sterilization is a widespread method of permanent contraception, pregnancy after tubal sterilization is quite rare. However, if pregnancy does occur after tubal ligation, there is a high probability that the pregnancy is ectopic (2,4). Encephalocele presents a rare anomaly of central nervous system. If any of these conditions are rare, having an intrauterine pregnancy with encephalocele anomaly after correctly applied sterilization technique is even more infrequent and unique.

The incidence of failure of tubal sterilization is very low and usually faulty surgical technique is the cause. Tubal sterilization has been reported to have a cumulative failure rate of 18.5 per 1000 (5). Three mechanisms account for most tubal sterilization failures: luteal pregnancy, surgeon's error, and technique failure. The true sterilization failures may occur secondary to spontaneous re-canalization of the fallopian tubes or tuboperitoneal fistula formation (5-8).

To our knowledge, the present case in which the patient had an intrauterine term pregnancy with encephalocele anomaly after correctly applied sterilization is the first such case reported in the literature.

2. Case

A 35-year-old woman, gravida 6, para 4, abortus 1 admitted to our hospital with suspected pregnancy. Because of menstrual irregularity, she did not know the date of last menstrual period. At the time of last cesarean section (CS), 2 years ago, the patient had undergone bilateral tubal ligation by Pomeroy's method. Her past medical history was significant only for tubal ligation performed at the time of CS, therefore she did not concern about pregnancy. Sonography revealed a viable, 33-week intrauterine pregnancy. Fetal biometric measurements were compatible with 33 weeks' gestation and that amniotic fluid volume was normal. The main pathologic finding of the ultrasound examination was an occipital encephalocele (max diameter 67 mm) containing brain tissue. On the sagittal section, it was clearly visible that encephalocele sac containing neural tissue was observed freely in the amniotic fluid. The later part of pregnancy was uneventful. On ultrasound examination before CS, the occipital encephalocele was 88 mm in maximum diameter. During CS, closer examination revealed that the proximal and distal parts of tubes were completely obstructed and apart from each other due to previously performed Pomeroy type tubal ligation and neither re-canalization of tubes nor tubo-peritoneal fistula formation were evident. A male fetus weighing 3310gr with Apgar scores 8 and 10 at 1 and 5 minutes, respectively delivered.

Physical examination revealed an occipital bone defect in the cranium and occipital encephalocele

(max diameter 85mm) (Figure 1). The next day, the newborn was referred to the neurosurgery department.
Figure-1

Figure 1. Photograph of newborn showing the characteristic features of occipital encephalocele.

3.Discussion

The incidence of pregnancy among sterilized women has been reported to be as high as 18.5 per 1000 (5), yet no term pregnancy with encephalocele anomaly following correctly performed tubal ligation had been reported so far. Major cause of tubal sterilization failure is usually faulty surgical technique. The true sterilization failures may occur secondary to spontaneous re-canalization of the fallopian tubes or tubo-peritoneal fistula formation (5-7). In our case, the patient had conceived spontaneously following correctly applied bilateral tubal ligation. Closer surgical examination revealed that the proximal and distal parts of tube were completely obstructed and apart from each other due to previously performed tubal ligation and neither re-canalization of tubes nor tubo-peritoneal fistula formation were evident
The failure rate of each operation should be discussed and the patient should be clear in her mind that the operation is not 100% guaranteed. The early diagnosis of intrauterine pregnancy after sterilization is particularly important to provide the appropriate prenatal care. In addition, it is of great importance for patients and physicians involved in the care of reproductive age women to be aware of pregnancy risk after tubal sterilization, and that a history of tubal sterilization does not preclude the possibility of a pregnancy in a woman who has symptoms or signs of pregnancy.

3. Conclusion

As many laboratories are using ion-exchange HPLC as a technique for monitoring as well as diagnosing diabetic patient by keeping few things mentioned above in mind before reporting will help in reducing the number of errors which can occur in this method. Though most of the information is available in pack insert which seems to be very basic but they are actually important during reporting the HbA1c value by HPLC. Laboratory person should report the cause of error during reporting which will help our clinicians in monitoring the diabetic patients. The number of diabetic population is increasing constantly it became more important to focus on the quality of report.

References

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