Introduction

Birth defects prevention are a major concern of public health policies in Romania accounting about 8% of live births. The bariatric procedures on women of reproductive age are on rise in the last 10 years. There are insufficient data if after those procedures the impact on the offspring normal development and if special attention should be paid to prevent CNS anomalies.

Case 1: 42 years old primipara, BMI 30.1 who underwent gastric sleeve 4 years prior to the pregnancy for BMI 42 was examined at 21 weeks by ultrasound. Mild ventriculomegaly, cavum septum interpositum and Blake pouch cyst were found. The patient had low risk at NIPT. CMV and Toxoplasma were negative. The patient didn’t take folic acid. The couple went for TOP that was performed in other unit.

Case 2: 38 years old primigravida, BMI 27.8 with bariatric surgery 2 years prior to pregnancy underwent first trimester scan. The ultrasound scan revealed: encephalocel, facial cleft, hands anomalies (sindactily and mitten hands). As a differential diagnosis we considered T13 and Meckel Gruber syndrome. The patient declined genetic investigations and decided for TOP. Post-procedural findings confirmed the anomalies.

Case 3: 35 years old secundipara BMI 29 after gastric sleeve 2 years previously for BMI 41 with a normal first child presented for the second trimester anomaly scan. The ultrasound revealed mild ventriculomegaly, Arnold Chiari malformation and sacral meningomielocel. The couple decided to continue the pregnancy. The neural tube defect was operated after birth but the further outcome of the baby is unknown.

Conclusion

Our experience is limited by the small number of cases. The bariatric procedures could increase the risk congenital CNS defects explained as a result of a nutrients deficient availability. Folic acid supplement could reduce the SNC congenital anomalies and women should be counseled to increase their diet folic acid content.