Abstract:
Placenta Previa (PP), both major and minor, affects approximately 1 in 250 pregnancies and, at times it can be life threatening, with an associated perinatal mortality rate 3-4 times higher than normal pregnancies. The aim of this study was to compare general and obstetrical characteristics and outcomes of pregnant women presenting with different types of PP in the premises of University Hospital for Obstetrics and Gynecology “Queen Geraldine” during 2013-2017 in Tirana, Albania, a post-communist South-East European country.

Methods:
This retrospective study included all pregnant women diagnosed with placenta previa and giving birth during 2013-2017 in Tirana, Albania. PP cases included all pregnant women already diagnosed with PP through ultrasonography examination during their pregnancy follow-up and giving birth to our hospital, pregnant women hospitalized for PP and/or PP women diagnosed at the emergency room during this period of time. Other information included gestational age, parity, previous cesarean deliveries, need for blood transfusion and blood units supplied to PP women, and maternal and surgical related morbidity and/or mortality.

To compare the mean values of numeric variables by type of PP we used the nonparametric Mann Whitney test. Binary logistic regression was used to assess the direction and strength of the association of PP type with other variables. Differences were regarded as significant if the P-value was <0.05. Statistical Package for Social Sciences (SPSS), version 19, was used for carrying out the statistical analysis.

Results:
In total there were diagnosed 169 PP cases among 34992 births, with an incidence rate of 0.48%. Major PP (total or partial) was present in 79 women (46.7%) and minor PP (marginal) was present in 90 women (53.3%). In total 10 hysterectomies were performed among PP women (9 in major PP women).

Placenta accreta was present in 8 major PP women (10.1%) and 1 minor PP women (1.1%). Maternal and gestational age, parity and previous cesarean deliveries were similar (P>0.05) among major and minor PP women. Almost all PP women needed blood transfusions. Morbidity among PP women included: postpartum hemorrhage (23.1%), puerperal sepsis (36.7%), wound infection (5.3%), acute renal failure (4.1%), disseminated intravascular coagulation and urinary tract infection (1.8% each).

Significantly more major than minor PP women needed 4 or more units of blood. Major placenta previa entails a more disadvantageous morbidity and mortality profile compared to minor PP women in Albania. This finding has medical and public health implications.

Conclusions:
Placenta previa is associated with considerable morbidity, mortality and post-operative complications among affected pregnant women in Albania, with major PP entailing a more disadvantageous profile compared to minor PP patients. The ever increasing cesarean delivery rates in Albania are potentially paving the way towards increasing of placenta previa rates as well, and the morbidity and mortality associated with it.

The health, public health and medical system should be prepared for this eventuality in order to ensure the best possible health care for the affected patients, appropriate management of placenta previa, thus reducing the post-surgery complications and lowering related costs to patients, families and the entire society.

In addition, intensive and active campaigns for curbing the seemingly unstoppable increasing trend of cesarean deliveries in the country (often elective and not medically indicated), should be a priority.

Background:
Placenta previa is the partial or complete implantation of placenta into the lower uterine segment accompanied by various degrees of obstruction of the internal cervical os depending on the severity of placental displacement (1,2). PP is categorized into the following types: complete, partial, marginal and low-lying (2).

Complete and partial PP completely or partially cover the internal os and are being termed as “major placenta previa” whereas marginal and low-lying PP do not cover the internal os and are termed “minor placenta previa” (3).

PP is quite a rare event, occurring in about 0.28% to 1.96% of pregnancies (4). Moreover, as pregnancy progresses, the placenta migrates towards more vascularized areas and resolves in about 66%-98% of cases, especially in partial and minor PP, thus allowing the lower uterine segment to develop (5-7).

Still, PP requires special medical attention due to its potential to precipitate affected pregnancies.

Limits of study:
A limitation of the study is that its basically cross-sectional design does not allow making assumptions about temporality of events and, as such, any association evidenced here should be interpreted with caution. Also, data refer only to births occurring in the capital city of Albania in one of the two University Hospitals for Obstetrics and Gynecology during 2013-2017, thus not representing all births and all PP cases in the country.

References: