Hypothesis / aims of study
The aim of the study was to evaluate changes of the pubic syphysis after the delivery and its pain conditions in a larger group of primiparous women who gave spontaneous births to the children at our clinic. Enlargement of the symphysis could be joined with pain and pelvic disorders. According to previous studies ultrasound examination of the pelvis appears to be of the same quality like semi-invasive radiographic investigation. We also wanted to investigate possible statistical correlation between the larger weight of foetuses and larger syphysis after delivery.

Study design, materials and methods
We observed the group of 250 primiparous women between 2nd to 4th day after the delivery. From logical reasons we omitted operative deliveries because of possible confounding of the study. Ultrasound examination of the pelvic symphysis was performed with regards to its enlargement. We evaluated subjective and objective complains of puerperae, and also the weight of their children after deliveries. Statistical examination was done considering previous investigations.

Results
We found arithmetic mean of pubic symphysis 6.38 mm (arithm.mean) with 1.38 SD. In women with symphyseal distance of ≥ 9 mm significant pain disorders were proved (22.72%) than in group with distance of <9 mm (only 7.01%). Chi-square test was 6.43 with significance p<0.05. We also found larger symphysis 7.49 mm (arithm.mean) in women with babies ≥3500 gr. than 5.71 mm with children <3500gr. Chi-square test 8.52 (p< 0.001) also proved significant pain disorder in those women who gave the birth to babies of higher weight.

Interpretation of results
In a group of 250 puerperae we found significant ultrasonographical changes of their symphyseal pubic rima respecting their pain disorders. Larger symphyses were found in women with babies heavier than 3500 gr.

Concluding message
Ultrasound examination of pubic syphysis after delivery could be very simple but accurate method for diagnostics of pelvic disorders.