

PUBIC SYMPHYSIS ULTRASOUND EXAMINATION

Hypothesis / aims of study

The aim of the study was to evaluate changes of the pubic symphysis 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 symphysis 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 complaints 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 < 3500 gr. 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 rimas respecting their pain disorders. Larger symphyses were found in women with babies heavier than 3500 gr.

Concluding message

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

<i>Specify source of funding or grant</i>	none
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Local Ethics Committee Hospital Na Bulovce
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes