Noninvasive Total Hemoglobin Monitoring with Multiwave Spectrophotometry in Obstetrics and Gynecology

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Results of prospective randomized comparative research of 2 total hemoglobin estimation methods are presented.

There were laboratory tests and continuous noninvasive technique with multiwave spectrophotometry on the Masimo Rainbow SET. Research was carried out in two stages. At the 1st stage (gynecology)--67 patients were included and in second stage (obstetrics)--44 patients during and after Cesarean section.

The standard deviation of noninvasive total hemoglobin estimation from absolute values (invasive) was 7.2 and 4.1%, an standard deviation in a sample--5.2 and 2.7% in gynecologic operations and surgical delivery respectively, that confirms lack of reliable indicators differences.

The method of continuous noninvasive total hemoglobin estimation with multiwave spectrophotometry on the Masimo Rainbow SET technology can be recommended for use in obstetrics and gynecology.