

# International Conference on Pediatrics & Gynecology

## Coarctation of the aorta undiagnosed early postpartum risk factor for sudden death in pregnancy

Manuela Stoicescu

Oradea University, Romania

This study was conducted on 321 hypertensive young patients aged 18-35 years in which we found 28 cases of coarctation of the aorta from pregnant women, representing 8.73% as a cause of hypertension, the disease being undiagnosed up to that point and hypertension were initially erroneously interpreted as gestational hypertension.

**Objective:** The main objective of this study was to identify which are the main diseases underlying the etiology of hypertension in young and this opportunity has been surprisingly discovered a congenital heart malformation - coarctation of the aorta - previously undiagnosed at hypertensive pregnant women, with contraindication for pregnancy.

**Design / Methods:** The study is the first complex longitudinal study of Romania at Bihor county level, for a period of three years between 2006 - 2009, on a lot of 321 hypertensive young patients, with aged 18-35 years, with values of BP>140/90mmHg persisted at three repeated measurements, to exclude white coat phenomenon very common in young or who had a severe value of BP>170-100mmHg from the first determination, at which has been identified the etiology of hypertension by clinical and complex laboratory investigations. The statistical analysis was done with the help of EPIINFO, the version 6.0, program of the Control and Prevention Center of Disease - CDC (Center of Disease Control and Prevention) of Atlanta, adapted processing of medical statistics. Were calculated parameters averages, frequency intervals, standard deviations, tests of statistical significance by Student method (t test) and  $\chi^2$ . The test t called Student test take into account the standard deviation of the sample.

**Results:** From the lot of 321 young hypertensive patients studied, 15.27% had renal artery stenosis, 12.47% - glomerulonephritis after  $\beta$  hemolytic streptococcal infection, 5.29% - polycystic kidney, 4.36% - diabetic nephropathy, 2.49% - hypoplastic kidney, 1.27% - primary reninoma, 5.60% - pheochromocytoma, 3.43% - Conn disease, 4.90% - hyperthyroidism, 2.80% - Cushing's syndrome, 9.03% - X metabolic syndrome, 2.80% - use oral contraceptives, 2.53% - consumption of NSAID and prednisone drugs, 1.55% - use of anabolic steroids, 8.73% - coarctation of the aorta and 17.40% - essential hypertension. Mention that the percentage of 8.73% of cases of coarctation of the aorta was diagnosed in pregnant women, at which has escaped previous diagnosis of pregnancy and hypertension was initially interpreted in the context of pregnancy.

**Conclusions:** Coarctation of the aorta is a congenital heart disease with evolving with cardiovascular secondary hypertension. Undiagnosed at time, early postpartum or in childhood can be very risky later in women, because pregnancy can aggravate hypertension and may be misinterpreted as gestational hypertension, having regard to the real diagnosis of coarctation of the aorta, which may worsen the prognosis of the patient, especially since in the pregnancy may appear innocent heart murmurs and that makes it difficult to interpret murmur heart at cardiac auscultation.

Hypertension during pregnancy is an important issue, primarily through the consequences that may occur to the fetus and secondly by not considering other causes of secondary hypertension in young women, some of them even contraindication further development of pregnancy, such as coarctation of the aorta.

Evolution of hypertension by coarctation of the aorta can be severe if the lesion is close. In addition to the occurrence of childhood and adolescence, hypertension may be complicated by bacterial endocarditis, aortic rupture and haemoperitoneum (especially during pregnancy) on fund of abdominal aortic aneurysm - with which it can coexist not known previously diagnosed, dissecting aneurysm of aorta and cerebral hemorrhage (when coarctation associated with cerebral aneurysms) with vital risk of sudden death.

### Biography

Manuela Stoicescu, MD Internal Medicine, PhD, assistant Professor of University of Oradea, Faculty of Medicine and Pharmacy Oradea, Romania, Medical I Department, 1 Decembrie No. 10 Avenue: Phone 0723019951, e-mail: manuela\_stoicescu@yahoo.com Home address: Republicii, No. 49, Ap. 7 Avenue, Oradea City, Romania Country, Code post: 410167