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# Retinopathy of prematurity, the prevalence and risk factors in Moldova

**[1]Liubovi Mazur, [1]Eugen Bendelic, [2]Angela Corduneanu**

[1]Department of Ophthalmology, *Nicolae Testemitanu* State University of Medicine and Pharmacy
[2]Department of Neonatology, *Gheorghe Paladi* Municipal Clinical Hospital, Chisinau, the Republic of Moldova

**Authors' ORCID iDs, academic degrees and contributions are available at the end of the article**

[*]Corresponding author – Liubovi Mazur, email: liubovi_2005@yahoo.com
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## Abstract

**Background:** Retinopathy of prematurity (ROP) is a serious disease that affects premature infants and still represents the leading cause of blindness worldwide that can be prevented if detected earlier in time.
**Material and methods:** The ROP prospective observational study was performed enrolling all premature infants admitted to the Intensive Neonatal Care (INC) and Premature Care Unit from January 2020 to December 2021 with the gestational age (GA) of 32 weeks and less at birth and body weight (BW) of 2000 g and less. A total of 98 premature infants had retinal evaluation by indirect ophthalmoscopy starting with the five postpartum weeks followed every 7-10 days until 38 weeks and then every 2 weeks until 42-45 weeks. The severity of ROP was graded according to the International classification of ROP. The effects of GA and BW on the prevalence and severity on ROP were evaluated.
**Results:** Out of studied 98 infants, 36 patients (36.7 %) developed ROP stage 1 and 2, in one or both eyes, 3 (3.07%) infants developed stage 3. Out of these 3 premature infants with stage 3, one underwent avastin intravitreal injection with successful regression, 2 patients underwent laser photocoagulation treatment successfully.
**Conclusions:** The prevalence of ROP in this unit-based study was 36 patients (36.7 %). The most important risk factors: Low gestational age, and low body weight. Lower gestational age and body weight was a risk factor, as the greatest number (76%) 20 infants out of 26 with GA ≤ 29 weeks and BW ≤1000g developed ROP stage 1 and stage 2; 3.06% (3 infants) developed stage 3. Very important in preventing ROP vision loss, screening all infants at risk regardless of GA and BW as well as the duration of staying in INC represents the greatest priority.
**Key words:** retinopathy of prematurity, newborn, gestational age, risk factors.

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