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DIAGNOSTIC ACCURACY OF REFERRAL DIAGNOSES FOR STAGE 4-5 RETINOPATHY OF PREMATURITY

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Introduction:

We aimed to evaluate the diagnostic accuracy of patients referred to the tertiary referral clinic for surgery for stage 4-5 retinopathy of prematurity (ROP).

Materials and methods:

The files of 72 patients who were referred to Gazi University Ophthalmology Department for vitreoretinal surgery with a diagnosis of stage 4 or 5 ROP between January 2018 and May 2024 were reviewed retrospectively. The referral diagnosis, birth week, indirect ophthalmoscopy findings, fundus fluorescein angiography findings, handheld optical coherence tomography findings, surgical procedures and final diagnoses were noted.

Results:

Thirty-six of the patients were female (50%). The mean gestational age was 29.9 + 3.5 weeks. Twenty-six of 71 patients (36.1%) had a mean gestational age of 32 weeks or more. The diagnosis was changed from ROP to Coats' Disease in two (4.3%) of 46 infants with a gestational age below 32 weeks. The diagnosis was changed in 14 (53.8%) of the babies with a gestational age of 32 weeks or more. Of the 14 patients, four (28.5%) were diagnosed as Terson Syndrome, three (21.3%) as familial exudative vitreoretinopathy, two (14.2%) as incontinentia pigmenti, one (7.2%) as Norrie's disease, one (7.2%) Coats' disease, one (7.2%) dyskeratosis congenita, one (7.2%) ocular toxoplasmosis, and one (7.2%) vitreous hemorrhage of unknown cause. Additional systemic findings, fluorescein angiographic findings and intraoperative fundus findings and genetic results were helpful in changing the diagnosis.

Conclusions:

Comprehensive evaluations, including systemic and genetic assessments in infants over 32 weeks gestational age, guide accurate diagnoses and appropriate management strategies for pediatric vitreoretinal surgery.