Ocular histopathology features seen with congenital Zika

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(HealthDay)—Certain ocular histopathologic features are consistently

found in fetuses with congenital Zika syndrome (CZS), according to a study published online Sept. 21 in *JAMA Ophthalmology*.

Maria P. Fernandez, M.D., from the University of Miami, and colleagues analyzed ocular tissue samples from four deceased fetuses (21.5 to 29 weeks of gestation) with a diagnosis of CZS. Analysis included microscopic examination and immunostaining using a Zika virus (ZIKV) NS2B protein antibody.

The researchers found that the four eyes manifested with pupillary membranes, immature anterior chamber angles, loss of pigment and thinning of the retinal pigment epithelium, choroidal thinning, undifferentiated nuclear layers of the retina, and a perivascular inflammatory infiltrate within the choroid. There was atrophy in the optic nerve in two of the eyes. Expression of ZIKV antigen was present in the iris of three cases, the neural retina and choroid in one case, and in the optic nerve in one case.

"Loss of retinal pigment epithelium, the presence of a thin choroid, a perivascular choroidal inflammatory infiltrate, and atrophic changes within the optic nerve were consistently present," the authors write.

More information: Abstract/Full Text