Torpedo maculopathy was discovered in 2 children as a pointed-oval retinal pigment epithelial (RPE) defect in the temporal macula. This congenital finding could be related to the fetal temporal macular “bulge” that normally occurs at 4 to 6 months’ gestation at the same site.

There are several congenital anomalies of the RPE, including congenital hypertrophy of the RPE (CHRPE), combined hamartoma of the retina and RPE, congenital simple hamartoma of the RPE, RPE hyperplasia associated with familial adenomatous polyposis, and torpedo maculopathy. In 1992, Roseman and Gass described a 12-year-old boy with a small, flat, circumscribed, oval RPE lesion in the temporal macula. Additional reports confirmed the consistent pointed oval configuration and macular location of this condition (Table).7-8 Rigotti and associates reported 3 cases of asymptomatic torpedo maculopathy in a child and 2 adults. Other articles have displayed images of similar lesion dimensions measuring 2 to 3 mm horizontally and 1 mm vertically.7-8

Congenital hypertrophy of the RPE is a flat congenital RPE lesion that appears pigmented or nonpigmented and characteristically has rounded or scalloped margins.2 Solitary CHRPE is located most often in the equatorial or peripheral fundus, randomly in various quadrants, and rarely in the macula (1%).2 Both CHRPE and torpedo macu-
Lopithal abnormalities are presumed to be congenital RPE abnormalities, but its random distribution and rounded appearance is unlike torpedo maculopathy. The RPE abnormalities associated with familial adenomatous polyposis and Gardner syndrome are also similar to torpedo maculopathy, but those with familial adenomatous polyposis manifest a random distribution in the fundus and are often much smaller and more irregular in shape.1

In the published cases of torpedo maculopathy and our 2 current cases, there seems to be similarities in the clinical features of this condition in that all illustrations have shown a nonpigmented RPE lesion within the temporal region of the macula, ranging from immediately underneath the fovea to 1 mm from the fovea and approximately 2 to 3 mm in horizontal diameter and 1 mm in vertical diameter (Table). In all cases, the lesion was oval with a characteristic point aimed toward the fovea. There have been notable differences, however, in the temporal aspect with 2 alternative configurations that include a “frayed tail” or a rounded margin. The frayed tail was composed of either linear or dotted hyperpigmentation and hypopigmentation. The rounded margin was smooth and composed of either linear, rounded, or no hypopigmentation at the temporal margin. In our 2 cases, one showed the frayed tail appearance, whereas the other had a rounded margin.

The etiology of torpedo maculopathy remains speculative and some have credited abnormal choroidal development or ciliary vascular development leading to the localized, nonprogressive RPE lesion. The uniform location and size of this condition points toward a congenital defect at a precise time during fetal development of the RPE. The rounded margin was smooth and composed of either linear, rounded, or no hypopigmentation at the temporal margin. In our 2 cases, one showed the frayed tail appearance, whereas the other had a rounded margin. The uniform location and size of this condition points toward a congenital defect at a precise time during fetal development of the RPE. The rounded margin was smooth and composed of either linear, rounded, or no hypopigmentation at the temporal margin. In our 2 cases, one showed the frayed tail appearance, whereas the other had a rounded margin.

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dividing rapidly. Streeten postu-
lated that the temporal bulge was de-
signed to “fully expand the macu-
lar area by the 8th month gestation.”9
This prominent feature of fetal RPE
development correlates in location
and size with torpedo maculopa-
thy. Based on these observations, tor-
pedo maculopathy could represent
a persistent defect in the develop-
ment of the RPE in the fetal tempo-
ral bulge.

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data in the study and takes respon-
sibility for the integrity of the data and
the accuracy of the data analysis.

Financial Disclosure: None reported.

Funding/Support: This study was
supported by the Eye Tumor Re-
search Foundation, Philadelphia,
Pennsylvania (Drs C. L. Shields and
J. A. Shields).

Role of the Sponsors: The funders
had no role in the design or con-
duct of the study; in the collection,
analysis, or interpretation of the data;
or in the preparation, review, or ap-
proval of the manuscript.

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In 1795, Dr Isaac Thompson concocted an eye water of zinc sulfate, saffron, camphor, and rose water. It was sold as late
as 1939. This is 1 of a series of 32 medical trade cards advertising the product from 1875 through 1895.

Ophthalmological Ephemera

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