Macular Abnormality Observed by OCT in Children With Amblyopia Failing to Achieve Normal Visual Acuity After Long-Term Treatment

1. In optical coherence tomography (OCT) images, the macular abnormality in amblyopic patients is shown as ________.
   A. Thickened retinal nerve fiber layer (RNFL) in the macular area.
   B. Thinned RNFL in the macular area.
   C. Thickened RNFL in the macular area; fovea is not observed or not obvious.
   D. Fovea is observed or obvious.

2. Which type of amblyopia was dominant among the amblyopic patients with a family history of high myopia in the current study?
   A. Anisometropic amblyopia.
   B. Agnogenic amblyopia.
   C. Strabismic amblyopia.
   D. Ametropic amblyopia.

3. For amblyopic patients with macular abnormality observed by OCT, retinoscopy revealed that ________.
   A. The macula of amblyopic eyes appeared normal.
   B. The macula of amblyopic eyes appeared wine-colored; foveal reflex was absent or not obvious.
   C. Parafoveal reflex.
   D. Foveal reflex.

4. What were the characteristics of the normal OCT images?
   A. Radial line scan showed wave lines in fovea, the retinal map showed fovea in the macular area, and they corresponded to each other.
   B. The thicker areas of the retina appeared to be cool colors (blue and black).
   C. The thinner areas of the retina appeared to be warm colors (yellow and red).
   D. Radial line scan showed wave lines in fovea, the retinal map showed fovea in the macular area, but they corresponded to each other.

5. What did the OCT images of some of the cases in the study show?
   A. The retinal map showed thickened RNFL in the macular area, with no fovea; radial line scan showed no wave lines in fovea.
   B. Only binocular amblyopia was observed.

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INSTRUCTIONS

1. Review the stated learning objectives on the first page of the CME article and determine if these objectives match your individual learning needs.
2. Read the article carefully. Do not neglect the tables and other illustrative materials, as they have been selected to enhance your knowledge and understanding.
3. The following quiz questions have been designed to provide a useful link between the CME article in the issue and your everyday practice. Read each question, choose the correct answer, and record your answer on the CME REGISTRATION FORM at the end of the quiz.
4. Type or print your full name and address and your date of birth in the space provided on the CME REGISTRATION FORM.
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TARGET AUDIENCE

This CME activity is primarily targeted to pediatric ophthalmologists and ophthalmic surgeons. There are no specific background requirements for participants taking this activity.
C. The retinal map showed thickened RNFL in the macular area, with no fovea, and the inner circle appeared yellow because of thickened RNFL. But radial line scan showed wave lines in fovea, which is not consistent with the retinal map.
D. Only uniocular amblyopia was observed.

6. The ineffective curative effect may be ascribed to macular abnormality. Which examination can help to make a diagnosis?
   A. Computed tomography.
   B. OCT.
   C. B-scan.
   D. Fundus fluorescein angiography.

7. Which of the following is not correct about the curative effect on amblyopia with macular abnormality by OCT examination?
   A. Effective.
   B. Ineffective.
   C. Improvement.
   D. Recovery.

8. Traditionally, it is believed that the ineffective curative effect on amblyopia is due to all of the following EXCEPT _______.
   A. Late treatment.
   B. Lack of compliance with the therapeutic regimen.
   C. Inaccurate refractive correction during the treatment.
   D. Macular abnormality by OCT examination.

9. How did the authors explain the phenomenon that retinal map showed thickened RNFL in the macular area, with no fovea, whereas radial lines showed wave lines in fovea on the OCT image?
   A. They presumed that the appearance of wave lines in fovea was caused by thinned RNFL in the inner circle of the OCT image.
   B. They presumed that the appearance of wave lines in fovea was caused by thickened RNFL in the inner circle of the OCT image.
   C. They presumed that the appearance of wave lines in fovea would most likely be a false perception because of the grad difference caused by thinned RNFL in the inner circle of the OCT image.
   D. They presumed that the appearance of wave lines in fovea would most likely be a false perception because of the grad difference caused by thickened RNFL in the inner circle of the OCT image.

10. Which is correct about the 15 cases of amblyopia in the current study?
    A. All of the subjects were premature infants.
    B. All the subjects failed to achieve normal visual acuity after treatment.
    C. All the subjects had ametropia.
    D. All of the subjects were low birth weight infants.